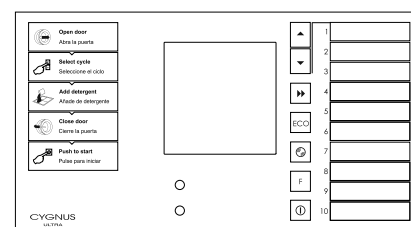
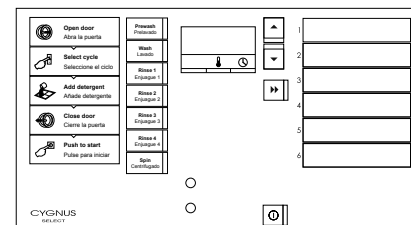
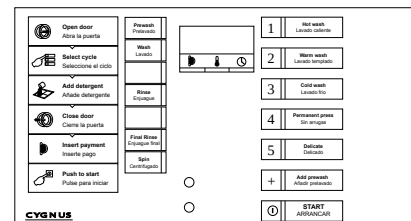


Washer-Extractors

Cygnus Vended, Cygnus Select and Cygnus Ultra Controls

Refer to Page 7 for Model Identification



CFD1467C_SVG

Original Instructions

Keep These Instructions for Future Reference.

(If this machine changes ownership, this manual must accompany machine.)

Table of Contents

Safety Information.....	4
Explanation of Safety Messages.....	4
Important Safety Instructions.....	4
Safety Decals.....	5
Operator Safety.....	5
 Introduction.....	 7
Model Identification.....	7
Delivery Inspection.....	7
Nameplate Location.....	7
Replacement Parts	7
Customer Service.....	7
 Cygnus Operation.....	 9
Cygnus Vended Control.....	9
Operational Keypad.....	9
Operating Instructions – Cygnus Vended Control.....	9
Information Menu – Cygnus Vended Control.....	11
Cygnus Select Control.....	12
Operational Keypad.....	12
Operating Instructions – Cygnus Select Control.....	12
Information Menu – Cygnus Select Control.....	14
Cygnus Ultra Control.....	14
Operational Keypad.....	15
Display Identification.....	16
Operating Instructions – Cygnus Ultra Control.....	17
Information Menu – Cygnus Ultra Control.....	19
Functions Menu – Cygnus Ultra Control	19
 Maintenance.....	 21
Daily.....	21
Beginning of Day.....	21
End of Day.....	21
Weekly.....	21
Monthly.....	22
Quarterly.....	22
Annually.....	23
Care of Stainless Steel.....	23

Safety Information

Explanation of Safety Messages

Precautionary statements [“DANGER,” “WARNING,” and “CAUTION”], followed by specific instructions, are found in this manual and on machine decals. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

	DANGER
Indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.	
	WARNING
Indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.	
	CAUTION
Indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.	

Additional precautionary statements [“IMPORTANT” and “NOTE”] are followed by specific instructions.

IMPORTANT: The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE: The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

Important Safety Instructions

	WARNING
To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:	
W023	

- Read all instructions before using the washer.

- Install the washer according the INSTALLATION instructions. Refer to the GROUNDING instructions in the INSTALLATION manual for the proper grounding of the washer. All connections for water, drain, electrical power and grounding must comply with local codes and be made by licensed personnel when required. It is recommended that the machine be installed by qualified technicians.
- Do not install or store the washer where it will be exposed to water and/or weather.
- To prevent fire and explosion, keep the area around machine free from flammable and combustible products. Do not add the following substances or textiles containing traces of the following substances to the wash water: gasoline, kerosene, waxes, cooking oils, vegetable oils, machine oils, dry-cleaning solvents, flammable chemicals, thinners, or other flammable or explosive substances. These substances give off vapors that could ignite, explode or cause the fabric to catch fire by itself.
- Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using a washing machine or combination washer-dryer, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. The gas is flammable, do not smoke or use an open flame during this time.
- To reduce the risk of an electric shock or fire, DO NOT use an extension cord or an adapter to connect the washer to the electrical power source.
- Do not allow children to play on or in the washer. Close supervision of children is necessary when the washer is used near children. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance. This is a safety rule for all appliances.
- DO NOT reach and/or climb into the tub or onto the washer, ESPECIALLY if the wash drum is moving. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
- Never operate the washer with any guards, panels and/or parts removed or broken. DO NOT bypass any safety devices or tamper with the controls.
- Use washer only for its intended purpose, washing textiles. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket or tub.
- Use only low-sudsing, no-foaming types of commercial detergent. Be aware that hazardous chemicals may be present. Wear hand and eye protection when adding detergents and chemicals. Always read and follow manufacturer’s instructions on packages of laundry and cleaning aids. Heed all

warnings or precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times [preferably in a locked cabinet].

- Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- Always follow the fabric care instructions supplied by the textile manufacturer.
- Loading door **MUST BE CLOSED** any time the washer is to fill, tumble or spin. **DO NOT** bypass the loading door switch by permitting the washer to operate with the loading door open. Do not attempt to open the door until the washer has drained and all moving parts have stopped.
- Be aware that hot water is used to flush the supply dispenser. Avoid opening the dispenser lid while the machine is running.
- Do not attach anything to the supply dispenser's nozzles, if applicable. The air gap must be maintained.
- Do not operate the machine without the water reuse plug or water reuse system in place, if applicable.
- Be sure water connections have a shut-off valve and that fill hose connections are tight. **CLOSE** the shut-off valves at the end of each wash day.
- Keep washer in good condition. Bumping or dropping the washer can damage safety features. If this occurs, have washer checked by a qualified service person.
- **DANGER:** Before inspecting or servicing machine, power supply must be turned **OFF**. The servicer needs to wait for at least 5 minutes after turning the power **OFF** and needs to check for residual voltage with a voltage meter. The inverter capacitor or EMC filter remains charged with high voltage for some time after powering **OFF**. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
- Do not repair or replace any part of the washer, or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out. **ALWAYS** disconnect the washer from electrical, power and water supplies before attempting any service.
- Disconnect the power by turning off the circuit breaker or by unplugging the machine. Replace worn power cords.
- Before the washer is removed from service or discarded, remove the door to the washing compartment.
- Failure to install, maintain, and/or operate this washer according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.

NOTE: The WARNINGS and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining, or operating the washer.

Any problems or conditions not understood should be reported to the dealer, distributor, service agent or the manufacturer.



WARNING

Machine installations must comply with minimum specifications and requirements stated in the applicable Installation Manual, any applicable municipal building codes, water supply requirements, electrical wiring regulations and any other relevant statutory regulations. Due to varied requirements and applicable local codes, this machine must be installed, adjusted, and serviced by qualified maintenance personnel familiar with applicable local codes and the construction and operation of this type of machinery. They must also be familiar with the potential hazards involved. Failure to observe this warning may result in personal injury, property damage, and/or equipment damage, and will void the warranty.

W820

IMPORTANT: Ensure that the machine is installed on a level floor of sufficient strength. Ensure that the recommended clearances for inspection and maintenance are provided. Never allow the inspection and maintenance space to be blocked.



WARNING

Never touch internal or external steam pipes, connections, or components. These surfaces can be extremely hot and will cause severe burns. The steam must be turned off and the pipe, connections, and components allowed to cool before the pipe can be touched.

SW014

Safety Decals

Safety decals appear at crucial locations on the machine. Failure to maintain legible safety decals could result in injury to the operator or service technician.

Use manufacturer-authorized spare parts to avoid safety hazards.

Operator Safety

	WARNING
NEVER insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.	
SW012	

The following maintenance checks must be performed daily:

1. Verify that all warning labels are present and legible, replace as necessary.
2. Check door interlock before starting operation of the machine:
 - a. Attempt to start the machine with the door open. The machine should not start.
 - b. Close the door without locking it and start the machine. The machine should not start.
 - c. Attempt to open the door while a cycle is in progress. The door should not open.

If the door lock and interlock are not functioning properly, disconnect power and call a service technician.

3. Do not attempt to operate the machine if any of the following conditions are present:
 - a. The door does not remain securely locked during the entire cycle.
 - b. Excessively high water level is evident.
 - c. Machine is not connected to a properly grounded circuit.

Do not bypass any safety devices in the machine.

	WARNING
Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.	
W728	

Introduction

Model Identification

Information in this manual is applicable to these models:

CH018	CXN075	IHR014
CH025	CXN100	IHR018
CH040	CXN165	IHR025
CH055	CXN235	IHR030
CH075	CXN305	IHR040
CH090	CXR018	IHR055
CHF455	CXR025	IHR075
CHF575	CXR035	IHR090
CHF730	CXR055	IS012
CHN075	CXR075	IS018
CHN100	IH014	IS025
CHN185	IH018	IS035
CHN235	IH025	IS055
CHN305	IH030	IS075
CHN400	IH040	IS100
CHR018	IH055	IS135
CHR025	IH075	IS165
CHR040	IH090	IXN060
CHR055	IHF455	IXN075
CHR075	IHF575	IXN100
CHR090	IHF730	IXN165
CS018	IHN065	IXN235
CS025	IHN075	IXN305
CS035	IHN100	IXR012
CS055	IHN135	IXR018
CS075	IHN185	IXR025
CS100	IHN235	IXR035
CS135	IHN305	IXR055
CS165	IHN400	IXR075

Delivery Inspection

Upon delivery, visually inspect crate, protective cover, and unit for any visible shipping damage. If signs of possible damage are

evident, have the carrier note the condition on the shipping papers before the shipping receipt is signed, or advise the carrier of the condition as soon as it is discovered.

Nameplate Location

The nameplate is located on the back of the machine. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance. Refer to *Figure 1*.

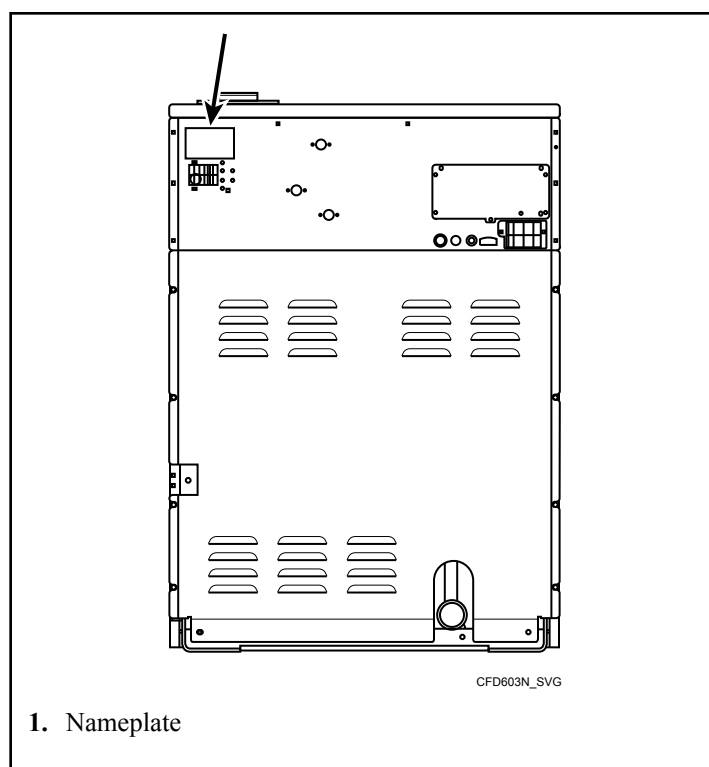


Figure 1

Replacement Parts

If literature or replacement parts are required, contact the source from which the machine was purchased or contact Alliance Laundry Systems at +1 (920) 748-3950 for the name and address of the nearest authorized parts distributor.

Customer Service

For technical assistance, contact your local distributor or contact:

Alliance Laundry Systems
Shepard Street
P.O. Box 990
Ripon, WI 54971-0990
U.S.A.

Introduction

www.alliancelaundry.com

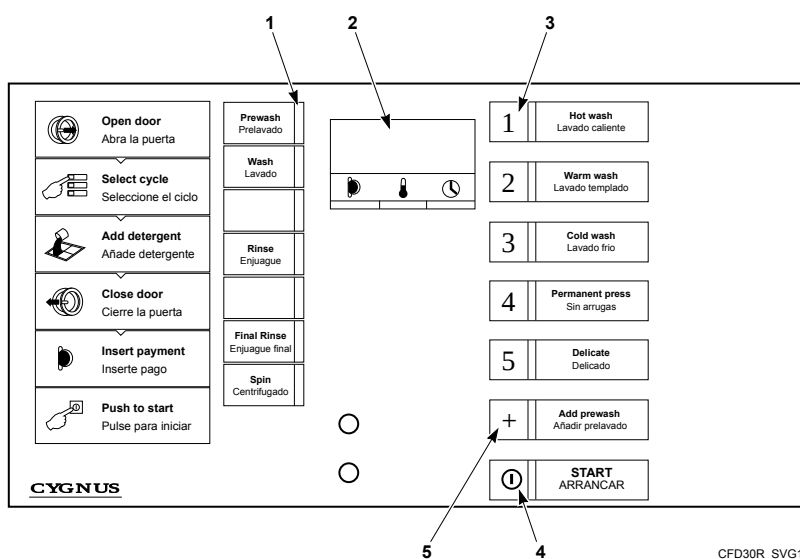
Phone: +1 (920) 748-3121 Ripon, Wisconsin

Alliance International: +32 56 41 20 54 Wevelgem, Belgium

Cygnus Operation

Cygnus Vended Control

Operational Keypad



CFD30R_SVG1

1. Cycle Step LEDs
2. Display
3. Cycle Number Keypads
4. START Keypad
5. Add Prewash Keypad

Figure 2

Operating Instructions – Cygnus Vended Control

1. Open the door by pulling the door handle toward you.
2. Load the machine. Refer to *Figure 3*.

Load the washer-extractor to full capacity whenever possible, but do not exceed the rated dry-weight capacity of the machine if the fabric to be washed is dense, closely woven or heavily soiled.

Overloading the machine can result in an inferior wash. The operator may need to experiment to determine the optimum load size based on the fabric content, soil content and level of cleanliness required.

Do not underload the machine. Underloading can result in out-of-balance conditions and may lead to premature bearing and seal failure.

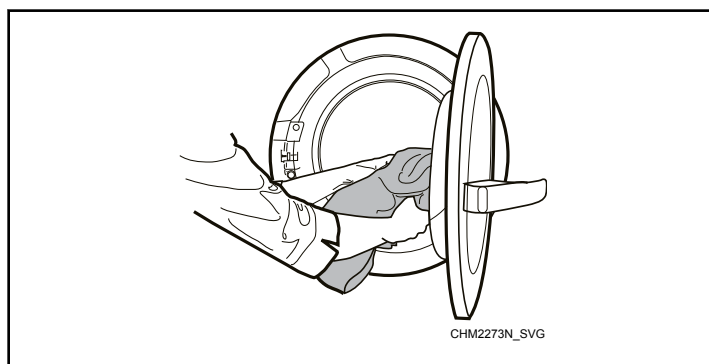


Figure 3

3. Close the door by pushing the door handle toward the machine. Refer to *Figure 4*.

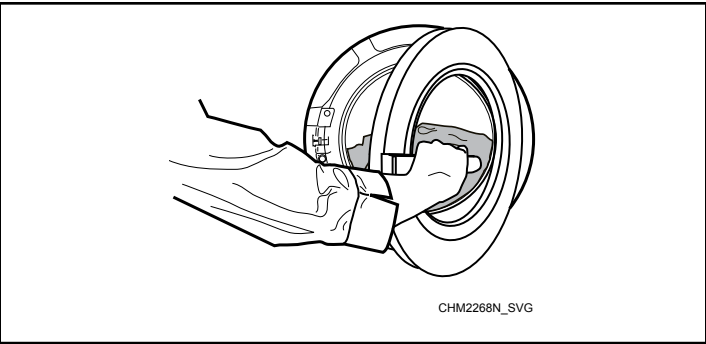


Figure 4

4. Add supplies to the supply dispenser. Refer to *Table 1* .
- a. Detergent:
 - Liquid - Compartment 1 (prewash) + Compartment 3
 - Powder - Compartment 1 (prewash) + Compartment 2
 - b. Bleach:
 - Liquid - Compartment 3
 - Powder - Compartment 2
 - c. Softener:
 - Liquid - Compartment 4

a. DETERGENT

1. Liquid Detergent

2. Powder Detergent

b. BLEACH

3. Liquid Bleach

4. Powder Bleach

c. SOFTENER

5. Liquid Softener

Table 1

5. Select a cycle by pressing a cycle number keypad. Refer to *Figure 5* .

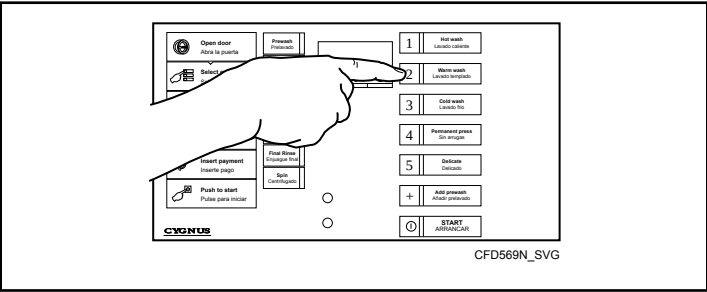
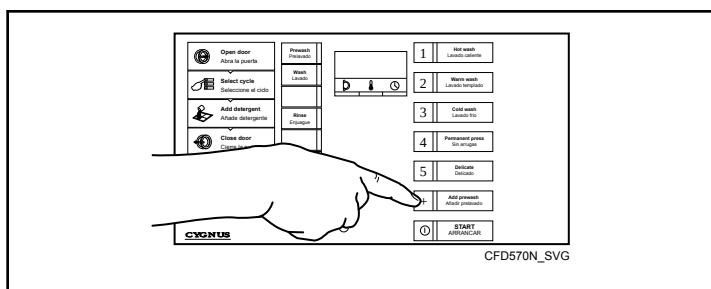
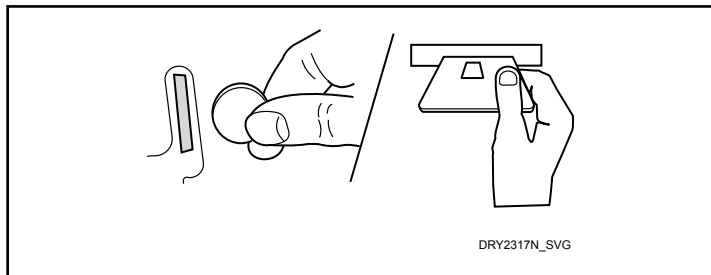


Figure 5

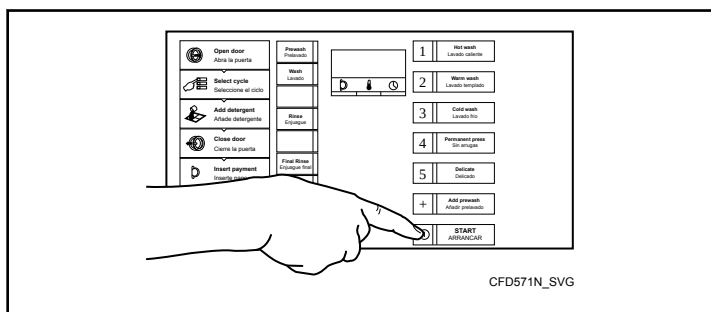
6. If necessary, add a prewash to the cycle by pressing the Add prewash keypad. Refer to *Figure 6* .

**Figure 6**

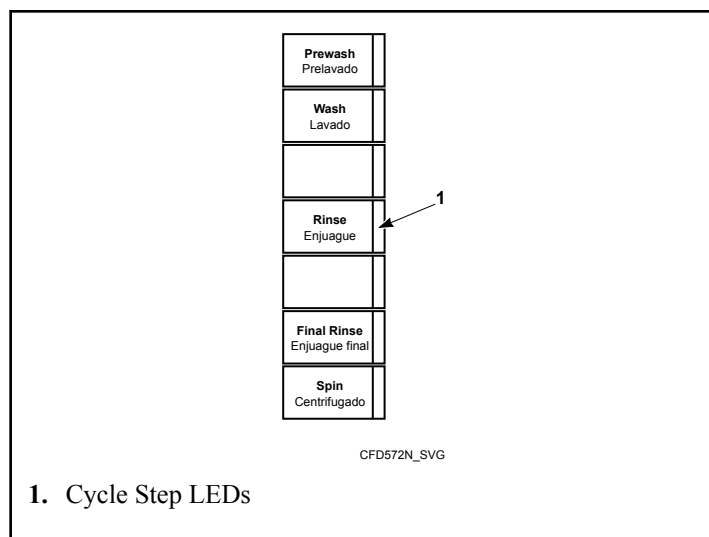
7. Make payment. Refer to *Figure 7*.

**Figure 7**

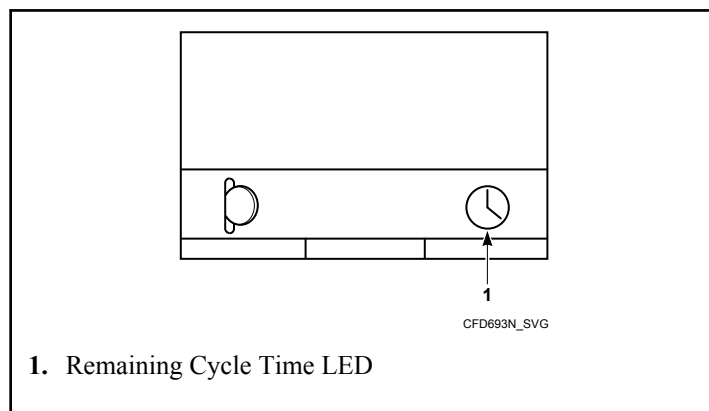
8. Start the cycle by pressing the START keypad. Refer to *Figure 8*.

**Figure 8**

As the cycle progresses, the cycle step LEDs turn on and off, indicating the step that is in process. Refer to *Figure 9*.

**1. Cycle Step LEDs****Figure 9**

While the cycle is in progress, the remaining cycle time is shown in the display and the cycle time LED is lit. Refer to *Figure 10*.

**1. Remaining Cycle Time LED****Figure 10**

9. The cycle will continue until its completion. When the cycle is complete, “End” appears in the display and the door is unlocked.

Information Menu – Cygnus Vended Control

While a cycle is in progress, the operator may view the basket’s rotation speed, water temperature and water level by accessing the Information Menu.

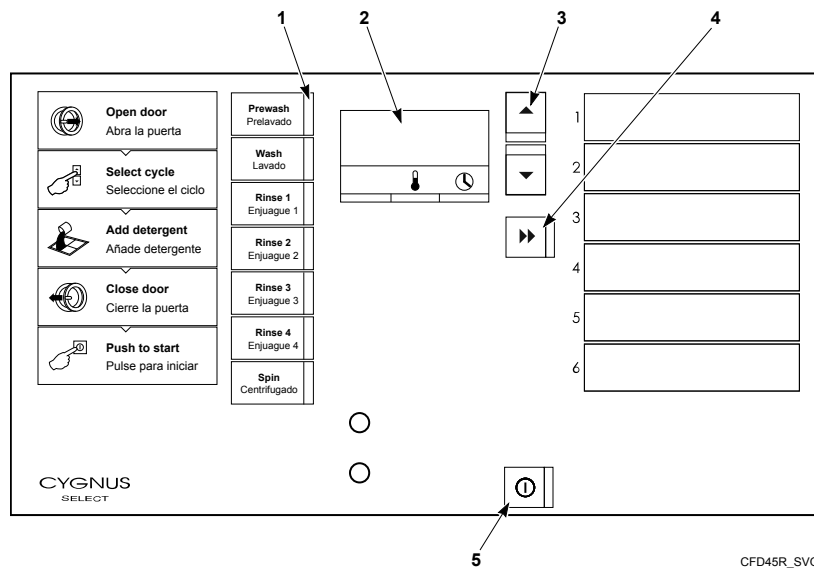
1. To access the Information Menu...
 - a. Press and hold the 1 keypad.
 - b. While continuing to press the 1 keypad, press and release the 2 keypad.
 - c. Continue to hold the 1 keypad until the display shows “SPEEd”, which is the first available option in the Information Menu.
2. Press the 1 and 2 keypads to scroll through the Information Menu options, which are as follows:
 - a. SPEEd: The display alternates between “SPEEd” and basket rotation speed.

- b. tEMP: The display alternates between “tEMP” and the water temperature in °C or °F.
- c. LEvEL: The display alternates between “LEvEL” and the water level in inches or centimeters.

- 3. To exit the Information Menu, press the START keypad.

Cygnus Select Control

Operational Keypad



CFD45R_SVG1

- 1. Cycle Step LEDs
- 2. Display
- 3. Up and Down Keypads
- 4. Enter Keypad
- 5. Start/Stop Keypad

Figure 11

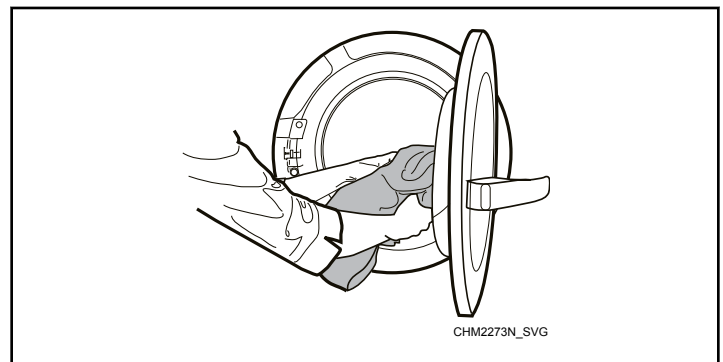
Operating Instructions – Cygnus Select Control

- 1. Open the door by pulling the door handle toward you.
- 2. Load the machine. Refer to *Figure 12*.

Load the washer-extractor to full capacity whenever possible, but do not exceed the rated dry-weight capacity of the machine if the fabric to be washed is dense, closely woven or heavily soiled.

Overloading the machine can result in an inferior wash. The operator may need to experiment to determine the optimum load size based on the fabric content, soil content and level of cleanliness required.

Do not underload the machine. Underloading can result in out-of-balance conditions and may lead to premature bearing and seal failure.



CHM2273N_SVG

Figure 12

- 3. Close the door by pushing the door handle toward the machine. Refer to *Figure 13*.

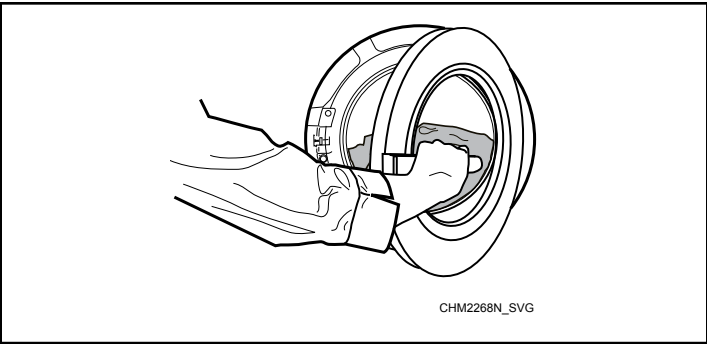


Figure 13

4. Add supplies to the supply dispenser. Refer to *Table 2*.
- a. Detergent:
 - Liquid - Compartment 1 (prewash) + Compartment 3
 - Powder - Compartment 1 (prewash) + Compartment 2
 - b. Bleach:
 - Liquid - Compartment 3
 - Powder - Compartment 2
 - c. Softener:
 - Liquid - Compartment 4

a. DETERGENT
1. Liquid Detergent
2. Powder Detergent
b. BLEACH

3. Liquid Bleach
4. Powder Bleach
c. SOFTENER
5. Liquid Softener

Table 2

5. Select a cycle by pressing the up and down keypads. Refer to *Figure 14*. The selected cycle appears in the display.

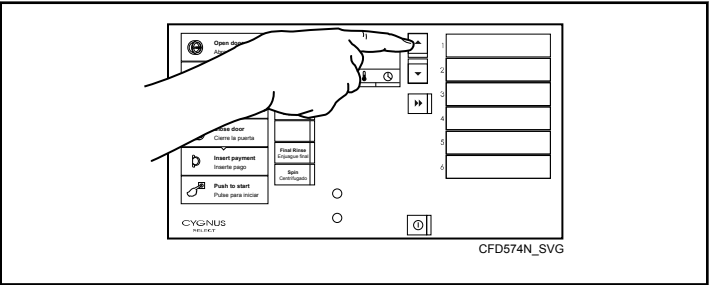
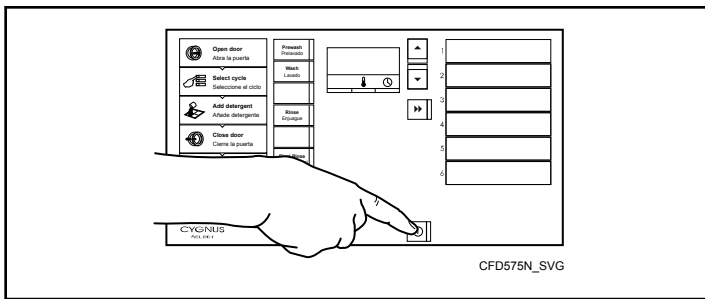
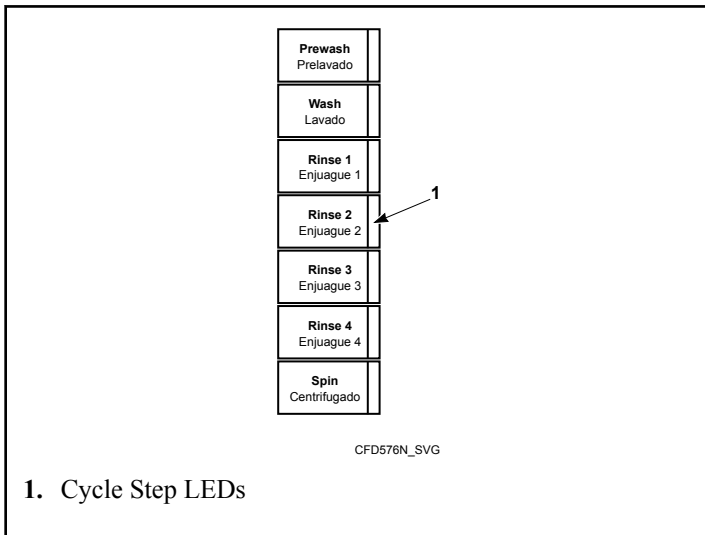


Figure 14

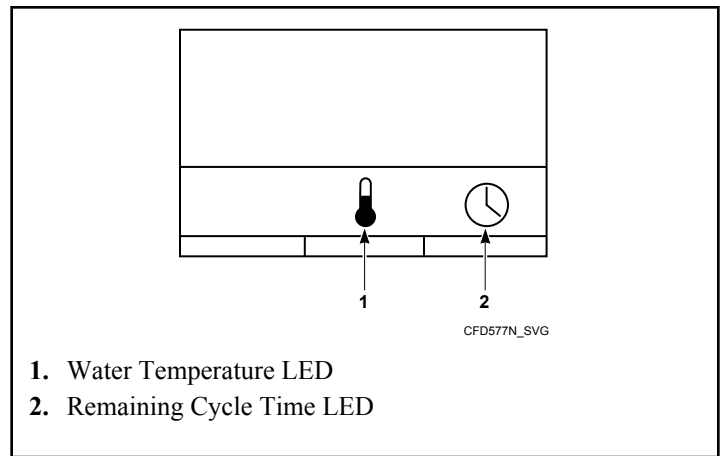
6. Start the cycle by pressing the Start/Stop keypad. Refer to *Figure 15*.


Figure 15

As the cycle progresses, the cycle step LEDs turn on and off, indicating the step that is in process. Refer to *Figure 16*.


1. Cycle Step LEDs
Figure 16

While the cycle is in progress, the display alternates between the cycle number, water temperature and remaining cycle time. When the water temperature is shown in the display, the water temperature LED is lit. When the remaining cycle time is shown, the cycle time LED is lit. Refer to *Figure 17*.


Figure 17

7. The cycle will continue until its completion. When the cycle is complete, “End” appears in the display and the door is unlocked.

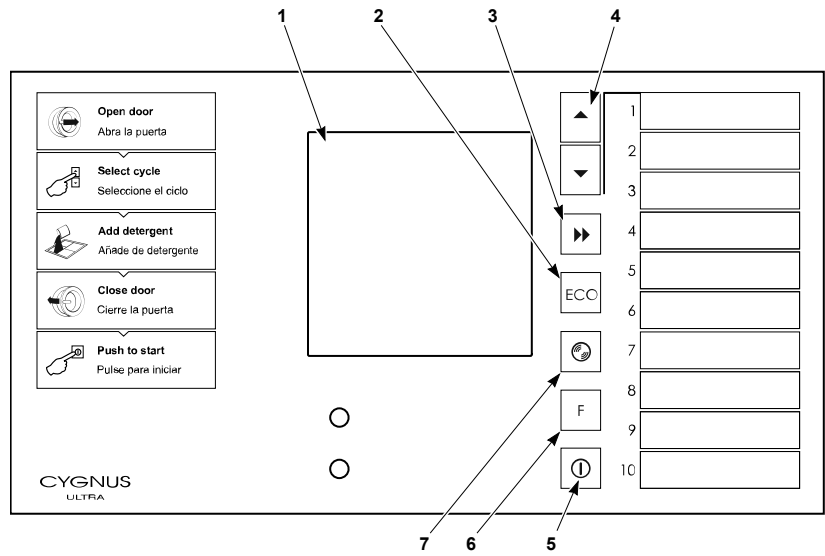
Information Menu – Cygnus Select Control

While a cycle is in progress, the operator may view the basket’s rotation speed, water temperature and water level by accessing the Information Menu.

1. To access the Information Menu...
 - a. Press and hold the Up Keypad.
 - b. While continuing to press the Up Keypad, press and release the Down keypad.
 - c. Continue to hold the Up Keypad until the display shows “SPEED XX”, which is the first available option in the Information Menu.
2. Press the Up and Down Keypads to scroll through the Information Menu options, which are as follows:
 - a. SPEED: The display shows “SPEED XX”, where “XX” is the rotation speed in RPMs.
 - b. tEMP: The display shows “tEMP XX”, where “XX” is the water temperature in °C or °F.
 - c. LEvEL: The display shows “LEvEL XX”, where “XX” is the water level in inches or centimeters.
3. To exit the Information Menu, press the Start/Stop Keypad.

Cygnus Ultra Control

Operational Keypad

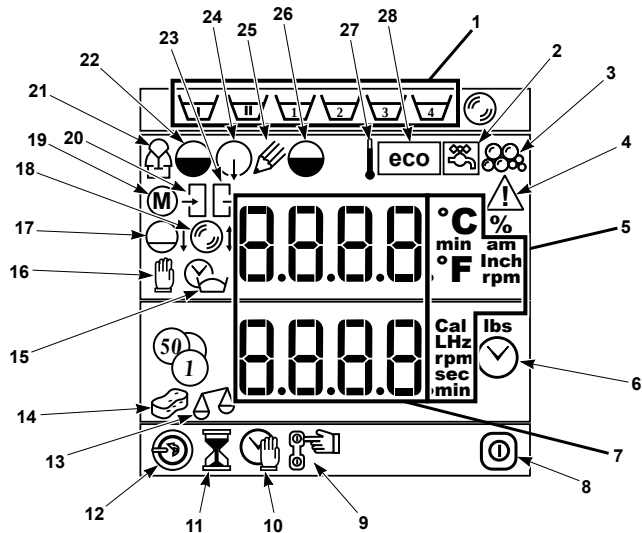


CFD63R_SVG1

1. Display
2. ECO Wash Keypad
3. Enter Keypad
4. Up and Down Keypad
5. Start/Stop Keypad
6. Functions Keypad
7. Modify Spin Keypad

Figure 18

Display Identification



CFD934R_SVG

1. Cycle Segments
2. Water Inlet
3. Supplies
4. Error Message
5. Units of Measure
6. Time
7. 7-Segment Display
8. Start/Stop
9. Operator Action Required
10. Delayed Start
11. Wait
12. Close Door/Open Door
13. Load-Dependent Wash (Weight)
14. Load-Dependent Wash (SMART WAVE)
15. Soak
16. Hold
17. Modified Wash Agitation
18. Reduced Spin Speed
19. Motor
20. Inputs
21. Test Program
22. Wash
23. Outputs
24. Drain
25. Edit
26. Water Level
27. Water Temperature
28. ECO Wash

Figure 19

Operating Instructions – Cygnus Ultra Control

1. Open the door by pulling the door handle toward you.
2. Load the machine. Refer to *Figure 20*.

Load the washer-extractor to full capacity whenever possible, but do not exceed the rated dry-weight capacity of the machine if the fabric to be washed is dense, closely woven or heavily soiled.

Overloading the machine can result in an inferior wash. The operator may need to experiment to determine the optimum load size based on the fabric content, soil content and level of cleanliness required.

Do not underload the machine. Underloading can result in out-of-balance conditions and may lead to premature bearing and seal failure.

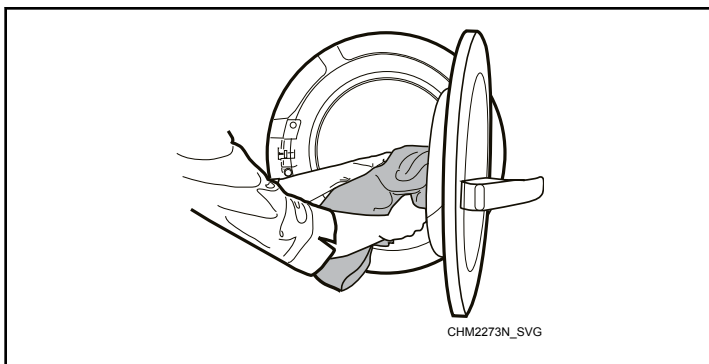


Figure 20

3. Close the door by pushing the door handle toward the machine. Refer to *Figure 21*.

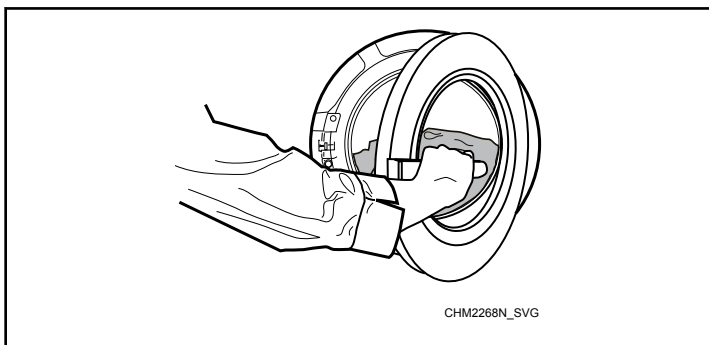
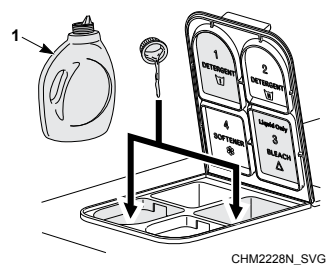


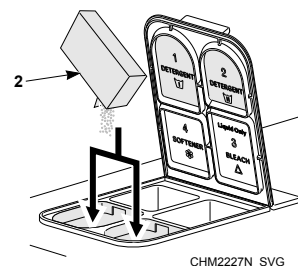
Figure 21

4. Add supplies to the supply dispenser. Refer to *Table 3*.
 - a. Detergent:
 - Liquid - Compartment 1 (prewash) + Compartment 3
 - Powder - Compartment 1 (prewash) + Compartment 2
 - b. Bleach:
 - Liquid - Compartment 3
 - Powder - Compartment 2
 - c. Softener:
 - Liquid - Compartment 4

a. DETERGENT

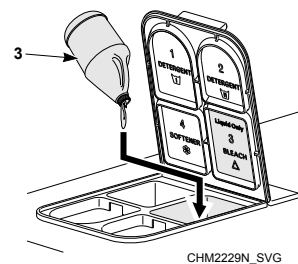


1. Liquid Detergent

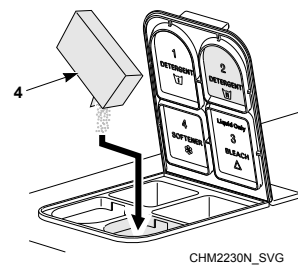


2. Powder Detergent

b. BLEACH



3. Liquid Bleach



4. Powder Bleach

c. SOFTENER

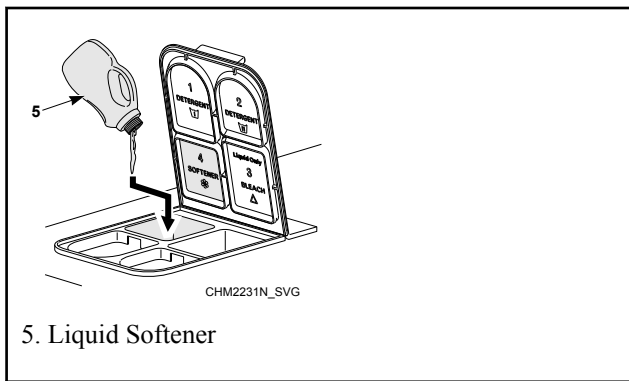


Table 3

5. Select a cycle by pressing the up and down keypads. Refer to *Figure 22* . The selected cycle appears in the display.

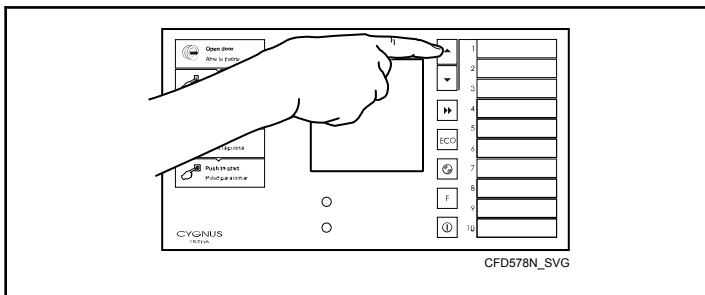


Figure 22

6. If necessary, modify the cycle's spin speed and/or reduce the cycle's water levels.
 - a. Modifying the Cycle's Spin Speed
 1. Press the Modify Spin Speed Keypad. Refer to *Figure 23* . The cycle's highest spin speed (in RPMs) is shown in the display and flashes on and off.
 2. Press the Up and Down Keypads to change the spin speed's value. Refer to *Figure 23* .
 3. Press the Enter Keypad to confirm the spin speed value change. Refer to *Figure 23* . The spin speed value change will only last for the current cycle.

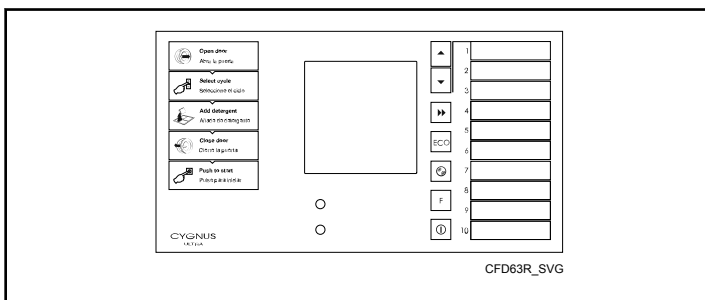


Figure 23

- b. Reducing the Cycle's Water Levels
 1. Press the ECO Wash Keypad. Refer to *Figure 24* . The ECO Wash Icon appears in the display.

NOTE: By default, the water level reduction is set to 20%, but can be adjusted by using the Cygnus Assist programming software.

NOTE: The water level reduction will only last for the current cycle.

NOTE: The water level reduction can also be selected while a cycle is in process by pressing the ECO Wash Keypad.

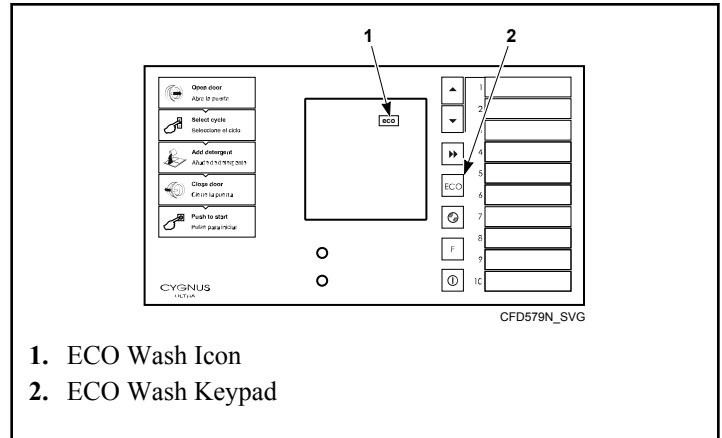


Figure 24

7. If necessary, select the cycle's start time, add a soak step to the cycle's first segment, modify the cycle to include a gentle wash agitation and/or modify the cycle's water levels and supplies based on the load. Refer to the Functions Menu section.
8. Start the cycle by pressing the Start/Stop Keypad. Refer to *Figure 25* .

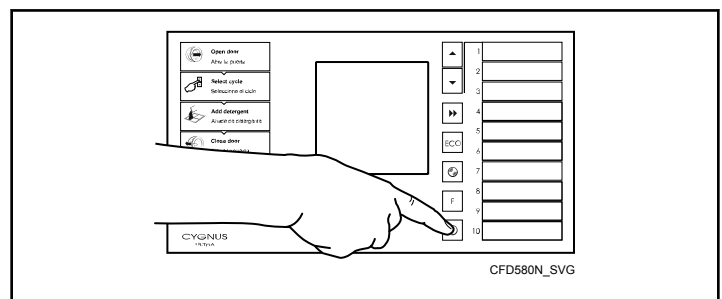
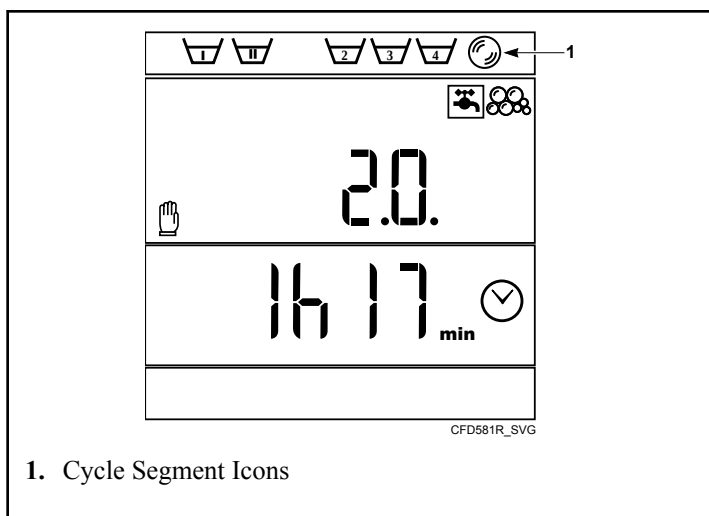
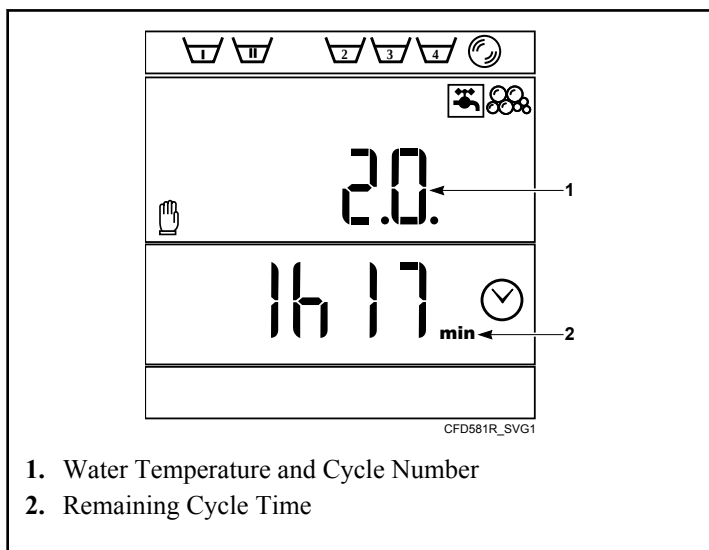


Figure 25

As the cycle progresses, the cycle segment icons flash on and off, indicating the segment that is in process. Refer to *Figure 26* .

**Figure 26**

While the cycle is in progress, the display alternates between the water temperature and cycle number. The remaining cycle time is also displayed. Refer to *Figure 27*. Additional icons will appear in the display to show the cycle's status. Refer to *Figure 27*.

**Figure 27**

9. The cycle will continue until its completion. When the cycle is complete, "End OPen" appears in the display and the door is unlocked.

Information Menu – Cygnus Ultra Control

While a cycle is in progress, the operator may view the basket's rotation speed, water temperature and water level by accessing the Information Menu.

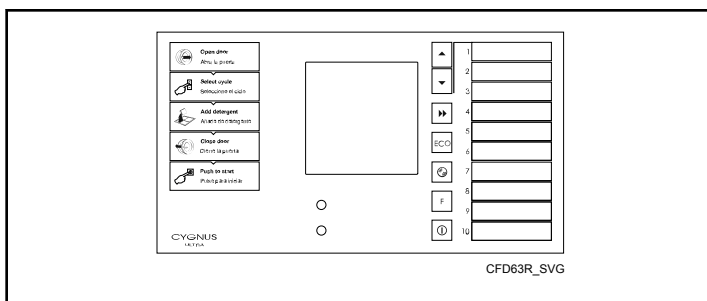
1. To access the Information Menu...
 - a. Press and hold the Up Keypad.
 - b. While continuing to press the Up Keypad, press and release the Down keypad.

- c. Continue to hold the Up Keypad until the display shows "XX SPEED", which is the first available option in the Information Menu.
2. Press the 1 and 2 keypads to scroll through the Information Menu options, which are as follows:
 - a. SPEED: The display shows "XX SPEED", where "XX" is the rotation speed in RPMs.
 - b. tEMP: The display shows "XX tEMP", where "XX" is the water temperature in °C or °F.
 - c. LEvEL: The display shows "XX LEvEL", where "XX" is the water level in inches or centimeters.
3. To exit the Information Menu, press the Start/Stop Keypad.

Functions Menu – Cygnus Ultra Control

Before a cycle is started, the operator may select the cycle's start time, add a soak step to the cycle's first segment, modify the cycle to include a gentle wash agitation and/or modify the cycle's water levels and supplies based on the load by accessing the Functions Menu.

1. To enter the Function Menu, press the Functions Keypad. Refer to *Figure 28*.

**Figure 28**

2. Press the Up and Down Keypads to scroll through the Functions Menu options, which are as follows:
 - a. dELA: Set the cycle to start at a specific time.
 1. Press the Enter keypad to access the option. "dELA hh:nn", which is the cycle start time, appears in the display. "HH", which represents the cycle start hour, will flash on and off. "nn" represents the cycle start minutes.
 2. Press the Up and Down Keypads to adjust the cycle start hour.
 3. Press the Enter Keypad. "nn", which represents the cycle start minutes, will flash on and off.
 4. Press the Up and Down Keypads to adjust the cycle start minutes.
 5. Press the Enter Keypad. The cycle start day of the week appears in the display.
 6. Press the Up and Down Keypads to adjust the cycle start day of the week.
 7. Press the Enter Keypad. The cycle start time and the current time appear in the display.

- b. SoAK: Add a soak step to the cycle's first segment. When the SoAK function is turned on, the cycle's first segment will begin with a high water level fill and will then continue with a left-right agitation every 4 minutes. The water temperature and soak time can be specified.
 1. Press the Enter keypad to access the option. "oFF" appears in the display, meaning the function is currently turned off.
 2. Press the Up or Down Keypad. "on" appears in the display, meaning the function is turned on.
 3. Press the Enter Keypad. The soak water temperature ("XX°X") appears in the display.
 4. Press the Up and Down Keypads to adjust the soak water temperature.
 5. Press the Enter Keypad. The soak time ("X h XX") appears in the display. The first "X" (hours) flashes on and off.
 6. Press the Up and Down keypads to adjust the soak time hours.
 7. Press the Enter Keypad. The "XX" (minutes) flashes on and off.
 8. Press the Up and Down Keypads to adjust the soak time minutes.
 9. Press the Enter Keypad.
 - c. GEnt: Modify the cycle to include a gentle wash agitation. When the GEnt function is turned on, the cycle's agitation time and agitation stop time are substituted for one another.
 1. "GEnt oFF" appears in the display, meaning the GEnt function is turned off.
 2. Press the Enter Keypad. "GEnt on" appears in the display, meaning the GEnt function is turned on.
 - d. SMartwave: Modify the cycle's water levels and supplies based on the load.
 1. Press the Enter Keypad. "SMartwave" appears in the display.
 2. Press the Up and Down Keypads to display the following options.
 - "SMartwave": When this option is selected the water level and supplies will be adjusted depending on the load's measured water absorption.
 - "oFF": The option is turned off.
 - "WGht": When this option is selected the water level and supplies will be adjusted depending on the load's measured weight. Press the Enter Keypad. "X.X" appears in the display. "X.X" (weight) flashes on and off. Press the Up and Down Keypads to adjust the weight.
 3. Press the Enter Keypad to select the desired option. "SMartwave weight" is displayed.
3. To exit the Functions Menu, press the Start/Stop keypad.

Maintenance

	WARNING
Sharp edges can cause personal injury. Wear safety glasses and gloves, use proper tools and provide lighting when handling sheet metal parts. W366R1	

IMPORTANT: Replace all panels that are removed to perform service and maintenance procedures. Do not operate the machine with missing guards or with broken or missing parts. Do not bypass any safety devices.

Daily

	WARNING
Do not spray the machine with water. Short circuiting and serious damage may result. W782	

IMPORTANT: Door lock should be checked daily to ensure proper operation. Also check that all safety and instruction stickers are on the machine. Any missing or illegible safety instructions stickers should be replaced immediately.

Beginning of Day

1. Check door interlock before starting operation:
 - a. Attempt to start the machine with the door open. The machine should not start.
 - b. Close the door without locking it and start the machine. The machine should not start.
 - c. Attempt to open the door while the cycle is in progress. The door should not open.

If the door lock and interlock are not functioning properly, disconnect power and call a service technician.

IMPORTANT: Door lock should be checked daily to ensure proper operation. Also, check that all safety and instruction stickers are on the machine. Replace as necessary.

2. Inspect water inlet valve hose connections on the back of the machine for leaks.
3. Inspect steam hose connections for leaks (where applicable).
4. Inspect all chemical inlets, lines and connections for leaks.

	WARNING
To reduce the risk of electrical shock, serious injury or death, disconnect the electrical power to washer-extractor before examining the wiring. W636	

5. Verify that insulation is intact on all external wires and that all connections are secure. If bare wire is evident, call a service technician.

End of Day

1. Clean the door gasket of residual detergent and all foreign matter.
2. Clean the door glass with a damp cloth.
3. Clean automatic supply dispenser lid and general area.
4. Clean the machine's top, front and side panels with mild detergent. Rinse with clean water. DO NOT use products that contain alcohol on the control panel.
5. Inspect and clean basket.
6. Clean the inverter drive box filter(s) weekly or more frequently as needed [where applicable]:
 - a. Wash the filter with warm water and allow filter to air dry. As an alternative, the filter may be vacuumed clean.

NOTE: Unload the machine promptly after each completed cycle to prevent moisture buildup. Leave loading door open after each completed cycle to allow moisture to evaporate.

Weekly

1. Check the machine for leaks.
 - a. Start an unloaded cycle to fill the machine.
 - b. Verify that door and door gasket do not leak.
 - c. Verify that the drain valve is operating and that the drain system is free from obstruction. If water does not leak out during the first wash segment, the drain valve is closed and functioning properly.
2. Clean the inverter drive box filter(s) weekly or more frequently as needed [where applicable]:
 - a. Wash the filter with warm water and allow filter to air dry. As an alternative, the filter may be vacuumed clean.

IMPORTANT: The control module cover and fan filter must be in place for the fan to properly cool the inverter drive. Failure to observe this warning will void the warranty and could lead to expensive inverter drive repair.

3. On machines equipped with an automatic chemical supply system, check chemical connections by inspecting all connections and chemical hoses for leaks or cracks.

IMPORTANT: Chemical leaks can quickly cause permanent damage to the machine components and structure.

Monthly

NOTE: Disconnect power to the machine at its source before performing the monthly maintenance procedures.

1. Check belt(s) require replacement or adjustment. Call a qualified service technician in either case.
 - a. Check belt(s) for uneven wear and frayed edges.
 - b. For groove-pulley drive systems, verify alignment by placing a straightedge across both pulley faces. The straightedge should make contact with the pulleys in four places. Refer to *Figure 29*. After making necessary adjustments, torque the upper spring tensioning jam nut to 20.6 ± 2 ft.-lbs.

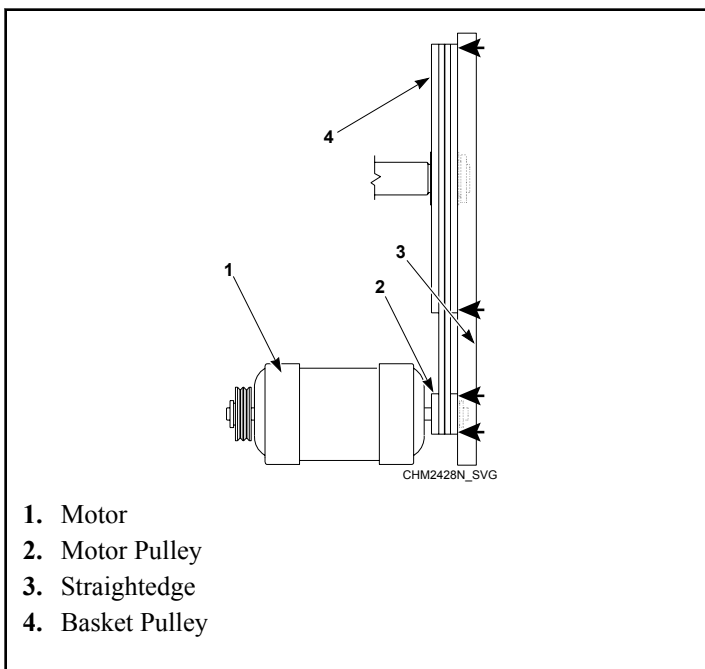


Figure 29

- c. Verify belt tension. Refer to *Belt Tension*.

Belt Tension		
Product Family	Model	Belt Tension (lbs.)
Cabinet Hard-mount	14, 18, 25, 65, 75 and 100	56-73

Belt Tension		
Product Family	Model	Belt Tension (lbs.)
	30, 35, 135 and 165	77-100
	33, 40, 150 and 185	116-151
	55 and 235	119-154
	75 and 305	149-194
	90 and 400	112-149
Cabinet Free-standing	12, 14, 18, 25, 60, 65, 75 and 100	106-172
	30, 35, 135 and 165	71-139
	55 and 235	185-236
	75 and 305	240-266
	455 and 575	90-103
	730 and 900	113-148

Table 4

2. Check overflow hose and drain hose for leaks.
3. Check the supply dispenser hoses and hose connections.
4. Clean inlet hose filter screens:
 - a. Turn water off and allow valve to cool, if necessary.
 - b. Unscrew inlet hose and remove filter screen.
 - c. Clean with soapy water and reinstall. Replace if worn or damaged.

Quarterly

NOTE: Disconnect power to the machine at its source before performing the quarterly maintenance procedures.

1. Tighten door hinges and fasteners, if necessary.
2. Tighten anchor bolts, if necessary.

3. Verify that the drain motor shield is in place and secure, if so equipped.
4. Clean customer-supplied steam filter, where applicable. Refer to *Figure 30*.
 - a. Turn off steam supply and allow time for the valve to cool.
 - b. Unscrew cap.
 - c. Remove element and clean.
 - d. Replace element and cap.

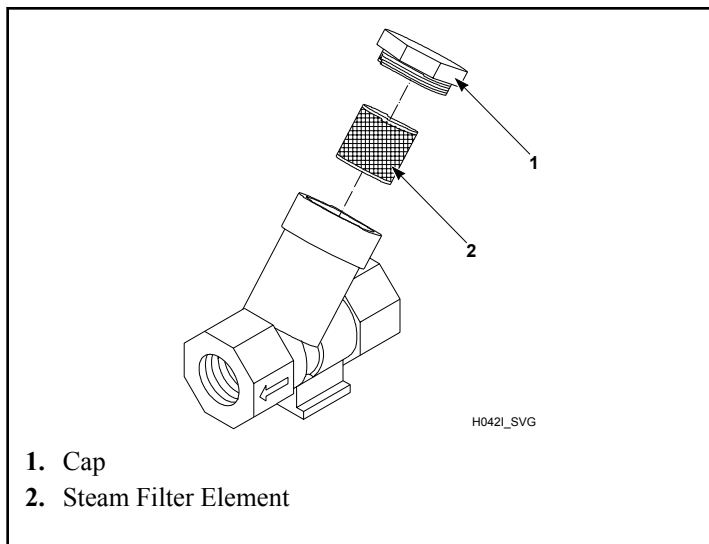


Figure 30

5. Tighten motor mounting bolt locknuts and bearing bolt locknuts.
6. Vacuum lint from motor vents.
7. Clean all electronic boards of moisture and dust with canned air.
8. Verify the insulation is intact on all external wires and that all connections are secure. If bare wire is evident, call a service technician.
9. Clean inverter drive cooling fan blades [where applicable].

Annually

For 75, 90, 305 and 400 models only, replace the machine's automatic lubricator.

Care of Stainless Steel

- Remove dirt and grease with detergent and water. Thoroughly rinse and dry after washing.
- Avoid contact with dissimilar metals to prevent galvanic corrosion when salty or acidic solutions are present.
- Do not allow salty or acidic solutions to evaporate and dry on stainless steel. Wipe clean of any residues.
- Rub in the direction of the polish lines or "grain" of the stainless steel to avoid scratch marks when using abrasive cleaners.

ers. Use stainless steel wool or soft, non-metal bristle brushes. Do not use ordinary steel wool or steel brushes.

- If the stainless steel appears to be rusting, the source of the rust may be an iron or steel part not made of stainless steel, such as a nail or screw.
- Remove discoloration or heat tint from overheating by scouring with a powder or by employing special chemical solutions.
- Do not leave sterilizing solutions on stainless steel equipment for prolonged periods of time.
- When an external chemical supply is used, ensure no siphoning of chemicals occurs when the machine is not in use. Highly concentrated chemicals can cause severe damage to stainless steel and other components within the machine. Damage of this kind is not covered by the manufacturer's warranty. Locate the pump and tubing below the machine's injection point to prevent siphoning of chemicals into the machine.