MULTI-LOAD COIN COMMERCIAL WASHER PROGRAMMING GUIDE (North America)

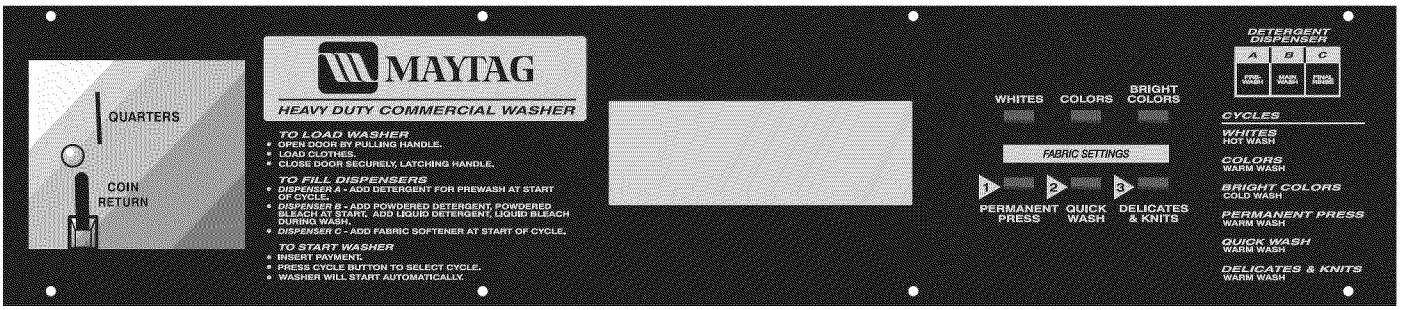


TABLE OF CONTENTS

WASHER SAFETY

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.

This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING." These words mean:

⚠ DANGER — **You can be killed or seriously injured if you don't immediately follow instructions.**

⚠ WARNING — **You can be killed or seriously injured if you don't follow instructions.**

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

IMPORTANT SAFETY INSTRUCTIONS

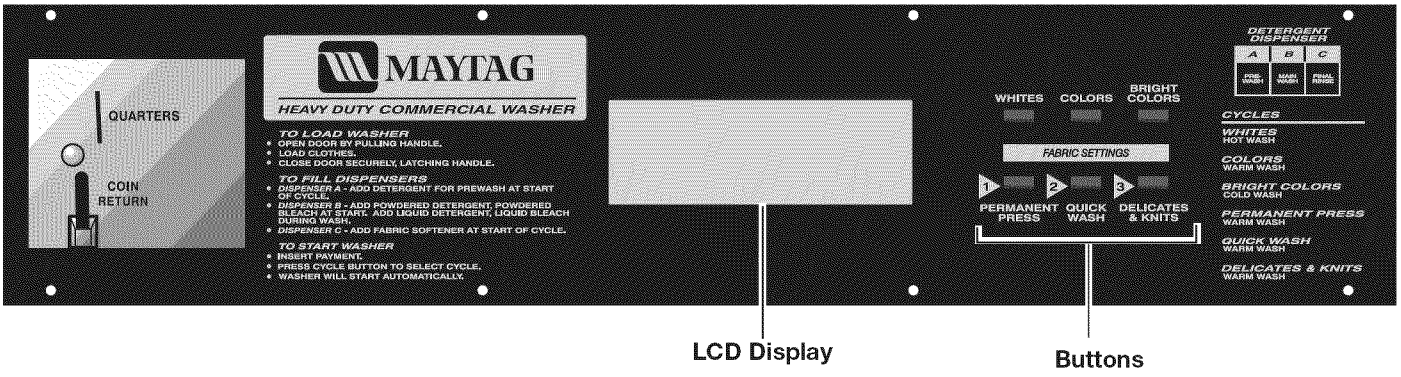
WARNING: To reduce the risk of fire, electric shock, or injury to persons when using the washer, follow basic precautions, including the following:

- Read all instructions before using the washer.
- Do not wash articles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, dry-cleaning solvents, other flammable, or explosive substances as they give off vapors that could ignite or explode.
- Do not add gasoline, dry-cleaning solvents, or other flammable, or explosive substances to the wash water. These substances give off vapors that could ignite or explode.
- Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for 2 weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using the washing machine, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. As the gas is flammable, do not smoke or use an open flame during this time.
- Do not allow children to play on or in the washer. Close supervision of children is necessary when the washer is used near children.
- Before the washer is removed from service or discarded, remove the door or lid.
- Do not reach into the washer if the drum, tub or agitator is moving.
- Do not install or store the washer where it will be exposed to the weather.
- Do not tamper with controls.
- Do not repair or replace any part of the washer or attempt any servicing unless specifically recommended in this manual or in published user-repair instructions that you understand and have the skills to carry out.
- See "Electrical Requirements" for grounding instructions.

SAVE THESE INSTRUCTIONS

CONTROL PANEL

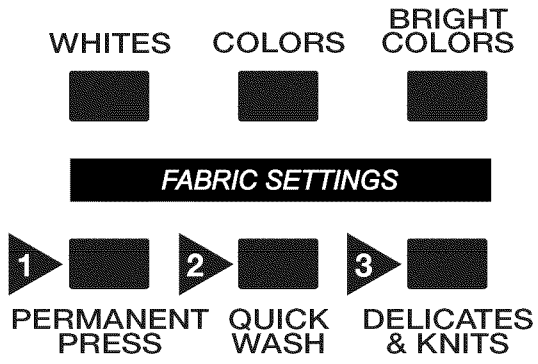
Control Panel Overview



Buttons

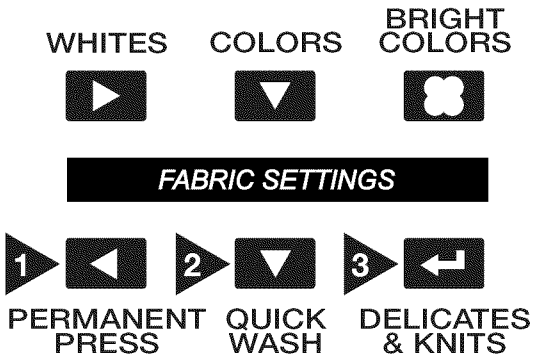
Wash Cycle Buttons

Buttons in the Run Mode function as WASH CYCLE BUTTONS.



Program Buttons

Buttons in the Service – Set-Up Mode function as PROGRAM BUTTONS.



- ARROW UP
  – Selects the previous menu item
- ARROW DOWN
  – Selects the next menu item
- LEFT ARROW
  – Selects the previous element of a menu item
  – Decreases the value
- RIGHT ARROW
  – Selects the next element of a menu item
  – Increases the value
- ENTER
  – Selects a new menu
  – Confirms a new value or list element and continues to the next menu item
- ESCAPE
  – Returns to previous menu
  – Maintains previous settings

How To Enter Program Mode

KEYSWITCH

The key switch is mounted in the front of the top cover panel.

With the key switch you can select “Run Mode” or “Service – Setup Mode.”

- RUN MODE: For normal washer operation.
- SERVICE – SETUP MODE: For changing the wash programs and washer settings. Also for information and diagnosis for service.

GENERAL CONTROL DESCRIPTION

Control Features

The control offers:

- 6 standard programs that can be adjusted:
  1. Whites
  2. Colors
  3. Bright Colors
  4. Permanent Press
  5. Quick Wash
  6. Delicates & Knits
- Automatic temperature balance during the water fill process
- Distribution of the garments to avoid unbalance
- 3 Languages (English, Spanish, French)
- Control signals for external pumps or liquid supply dispensers
- Coin/debit card payment in 3 modes:
  1. Single Pricing
  2. Temperature-Based Pricing
  3. Basic Price with Upgrade Functions
- Wash cycle stop and advance (with use of key switch)
- Information about water level, water temperature and other washer functions (with use of key switch)

Information displayed during operation:

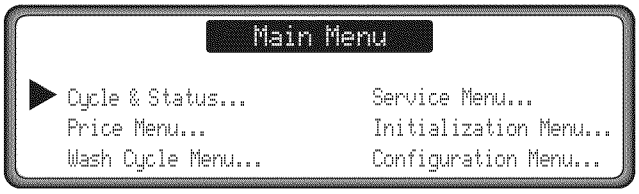
- Selected program name
- The active wash step number and sequence function
- The remaining cycle time
- The door lock status
- Diagnostic messages for troubleshooting

THE HARDWARE AND SOFTWARE OF THE MICRO-CONTROLLER GRAPHICS (MCG) WASH COMPUTER:

- Easy operation using a 6-button keypad
- The MCG board: Micro-controller board with Graphic LCD display
- Software update via replaceable flash memory chip
- Washer programs and SET-UP are stored in EEPROM memory (non-volatile memory)
- Category-based menu structure allows easy setup and programming

Service-Set-Up Mode

1. Turn the key switch from RUN mode to SERVICE – SET-UP mode.
2. In the SERVICE – SET-UP mode, the Main Menu screen is displayed.
3. In the Main Menu, select the desired Category Menu.



The CYCLE & STATUS Menu allows you to:

- Stop and Advance a wash cycle
- Get status information on the current cycle

The PRICE Menu allows you to:

- Set up general pricing-related functions
- Set up the washer as Single Price, Temperature-Based (individual) Price, or Upgradeable Pricing
- Set up wash cycle Normal Price and Special Prices

The WASH CYCLE Menu allows you to:

- Edit a wash program step by step, wash function by function

The SERVICE Menu allows you to:

- Cycle credit
- Run a Diagnostic program
- View a list of previously occurred Diagnostic and Help codes, as well as a list with Statistics.
- Toolbox functions:
  - View electric Input signals
  - Turn on/off the power supply to the Frequency Inverter
  - Select-Reset the Cycle counter

The INITIALIZATION Menu allows you to:

- Select the MCG Control Language
- Select Water Heater Temperature (hot water supply)
- Select Maximum Fill time value
- Select Overfill Detection Level value

The CONFIGURATION Menu allows you to:

- Select Machine Type
- Load default Factory Settings for resetting the wash computer
- Adjust the visual Brightness angle of the display
- Load the Frequency Inverter Parameters
- Erase all the programmed Wash Programs (reset Wash Program from EEPROM memory)
- Load the Standard Wash Programs

Create a Wash Program

- Wash programs are built step-by-step.
- Each step consists of a Wash/Rinse Sequence and a Drain/Spin Sequence.

Programmable Wash/Rinse Sequence:

- The available functions are:
  - Temperature
  - Water Level
  - Supplies (bulk dispensing)
  - Prewash Time
  - Wash Time
  - Rinse Time

Programmable Drain/Spin Sequence:

- The available functions are:
  - RPM (Final Spin)
  - Spin Time

NOTE: See WASHER STARTUP (see page 8) for more information.

The Tumble Sequence:

- The wash cycle will always end with the Tumble Sequence.
- The tumble sequence takes 30 seconds and begins when the cycle ends before the door can be opened.
- The Tumble Sequence cannot be changed.

Program Functions

Limits:

- To ensure the correct operation of the washer, values must be within certain limits.
- If a programmed value is outside the programmed limits, the default program value will override the programmed value.

Programmable Water Temperature:

- Minimum value : 34°F (1°C)
- Maximum value: 120°F (49°C) for Prewash and 180°F (82°C) for the Wash Sequence.
- For Rinse and Final Rinse, no temperature can be programmed (all rinses are in cold water).

Programmable Water Level:

- Water Level Limits:
  - See Table A-2 (see page 46) – Default Programmable Water Level as these values are different for each washer size.
    - Minimum value: above the temperature sensor
    - Maximum value: below the overflow outlet
- Normal Low Level, Normal High Level:
  - The normal Low Level is recommended for the Prewash and Wash Sequences.
  - The Normal High Level is recommended for the Rinse and Final Rinse Sequences.

NOTE: For woolens and other delicate fabrics, a normal high water level is recommended.

Programmable Extraction Speed:

- **Speed Limits:** See Table A-3 (see page 7) – Default Programmable Drum Speed at Wash and Spin for the minimum and maximum speed limits. The limits differ depending on the maximum allowed g-force at high spin for each washer size.

Programmable Supplies:

- One (1) Soap Supply Signal can be programmed for each of the following: prewash, wash, and final rinse.
- If Liquid soap pumps have been installed on the washer, a pulse signal must be sent to the external control system to activate the pumps. The pulse time value has to be programmed from the Soap Supplies menu.
- Default time is set for zero seconds.

  Time Limits:
  - The maximum programmable time is 99 seconds.
  - If the time is 0 seconds, the supply will NOT be activated during the wash cycle, even if the supply signal has been turned on.

Programmable Sequence Time:

- The sequence time starts running after the programmed water level has been reached.

  Time Limits:
  - Depends on the sequence type. See standard wash cycle charts in WASH PROGRAMS, starting on page 19.

WASHER STARTUP

Perform washer startup after the washer is installed. See the Installation Instructions for your washer. Startup consists of four steps:

- Install the washer mechanically.

MCG Wash Computer only:

- Select the washer-specific settings in the Configuration Menu.
- Select the operator-specific settings in the Initialization Menu.
- Adjust standard programs.

Initial configuration and initialization settings for the six (6) standard programs were done at the factory.

IMPORTANT:

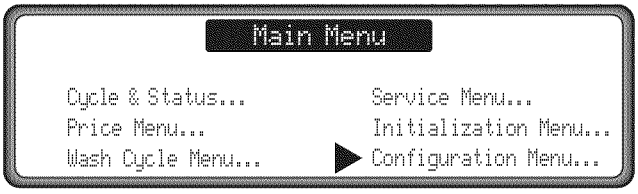
- Read this manual completely before making changes to the Configuration or Initialization Menus.
- Write down current settings before changing any setting.
- The default washer setups are used for a wide variety of models and applications. Some program modifications may be necessary to achieve optimum performance for your application.

Configuration

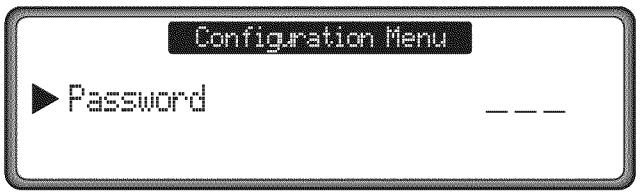
The Configuration Menu allows you to choose washer specific settings.

IMPORTANT: Only a qualified technician should perform configuration setup. Incorrect configuration setting could cause serious washer damage.

1. Make sure power is ON and no program is running.
2. Turn the key switch to SERVICE – SET-UP MODE. The Main Menu will be displayed.
3. Press ▼ to select the Configuration Menu.



4. Press ENTER. The password screen will appear.



Enter the password "3-2-1" (Bright Colors-Colors-Whites). Press ENTER.

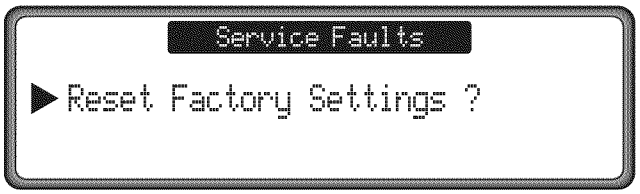
6. Press ▲ or ▼ to select the menu items individually.

IMPORTANT:

- Make sure you want to replace the previous settings before deleting them. Deleted settings cannot be retrieved. Only change washer size when a new MCG Wash Computer is installed.
- Make sure the correct washer type (see page 8) is selected to ensure proper washer function.
- Changing washer type will not change wash programs because the programs are kept in EEPROM memory. After changing washer type, it is recommended to erase the program memory and load the standard wash programs again. The wash programs differ for each washer type.
- It is recommended to select the factory reset if a new washer type has been selected. This ensures that all default settings of the new washer type are loaded.

If yes:

- All the Initialization and Configuration Menu settings will be cleared and the default Factory Settings will be re-installed.
- This function should only be used at the initialization of a new MCG Wash Computer.



Configuration Menu Options and Defaults

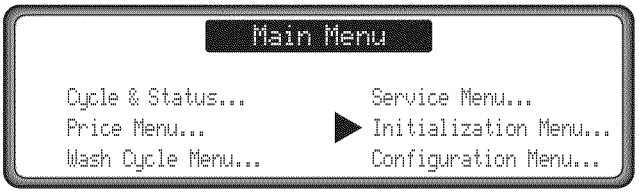
Menu Item	Description	Default	Range
Machine Type	Machines : MFR 18, 25, 30, 40, 50, 60, 80 Machines : MFS 18, 25, 35	MFR18	List
Reset Factory Settings? Are You Sure ?	Complete reset of wash computer. A new wash computer must be Factory Reset.	No	No/Yes
Brightness Display	Sets the Visualization angle of the Display.	12	0–25
Load Inverter Param. ? Are You Sure ?	Loads the Correct Parameters into the Inverter, depending on Machine Type selected. THIS IS DONE WHEN A NEW INVERTER IS INSTALLED.	No	No/Yes
Temperature	Select temperature in °F or °C.	Fahrenheit	List
Erase all Wash Prog ? Are You Sure ?	Complete reset of the wash programs. Existing values are erased completely.	No	No/Yes
Load Stand. Programs ? Language (English) Load Program 1–6 ?	Language selection of the titles of the Wash Programs. Wash Programs 1–6, as shown in this manual, are loaded.	No	No/Yes
Exit	Return to Main Menu.		

Initialization

The Initialization Menu allows you to choose standard default program settings for your application.

IMPORTANT: Only a qualified technician should perform initialization setup. Incorrect initialization setting could cause serious washer damage.

1. Make sure power is ON and no program is running.
2. Turn the key switch to SERVICE – SET-UP MODE. The Main Menu will be displayed.
3. Press ▼ to select the Initialization Menu. Press ENTER.



Initialization Menu Options and Defaults

Menu Item	Description	Default	Range
Language	Language selection: English, Spanish, French	English	List
Compart. Flush Pre-Wash	Makes sure the first soap dispenser compartment is always flushed at the end of the Wash Sequence.	Yes	No/Yes
Water Heater Temp.	It is recommended to set the temperature of the hot water supply to obtain a more accurate water temperature control during the fill process.	140°F	122–176°F
Max Water Fill Time	Diagnostic D7 is generated if the washer is not filled within its maximum allowed water fill time. When using a value of 99, no Diagnostic D7 is generated.	7 min.	5–99 min.
Overfill Detection	Diagnostic D15 is generated when the washer fills water 10 units above the programmed water level.	10 units	10–25 units
Exit	Return to Main Menu.		

NOTE: If a wrong language has been selected in error and the display cannot be read by the person programming the control, then follow the procedure for entering into the Initialization Menu, noting that Initialization Menu is the 5th selection, and the language setting is the first menu item in Initialization Menu. English is the first option followed by Spanish and then French.

PRICING MENU

In the PRICING MENU you can make settings for Coin Selection and Debit Card Reader.

General Pricing

General Pricing settings are stored through the General Menu.

To enter the General Pricing mode:

1. Make sure power is ON and no program is running.
2. Turn the key switch to SERVICE – SET-UP MODE. The Main Menu will be displayed.
3. Press ▼ to select the Pricing Menu. Press ENTER.

You will see:

4. Press ENTER.

General Pricing Menu Options and Defaults

Menu Item	Description	Default	Range
Value of Coin 1	This represents the value of coin 1.	0.25	0.05–9.95
Value of Coin 2	This represents the value of coin 2.	1.00	0.05–9.95
Regular Cycle Price	Wash Cycle Price	*	0.00–99.95
Special Cycle Price	Wash Cycle Price	*	0.00–99.95
Money Counter Permanently ?	Turns on Money Counter (Permanently = cannot be switched off anymore)	No	No/Yes
Reset Money Counts	Reset value of Money Counter shown only if "Money Counter: Yes"	No	No/Yes
Money Count : _ _ _ _	Value Money Counter (Info)	–	–
Vault: Display Counts	Show Money Counter when Vault is open.	Hidden	Hidden /Viewable
Price Display	Show the price, token or no information when invited for payment.	Normal	Normal/Token/ Hidden
Coin/Debit	Payment method selection	Coin	Coin/Card/Coin & Card Enhanced Debit
Clear Escrow	Escrow is cleared 30 minutes after end cycle.	Yes	No/Yes
Penny Increment Offset	Offset Cycle Price (Gen 2 Debit)	0.00	0.00–0.04
Decimal Selection	Show Decimal Point	Yes	No/Yes
Exit Price Menu	Return to Main Menu		

* depends on washer size (see Default Prices chart below)

Default Prices

Prices	MFR18	MFR25	MFR30	MFR40	MFR50	MFR60	MFR80	MFS18	MFS25	MFS35
Regular Cycle Price	$1.75	$2.50	$3.00	$4.00	$5.00	$6.00	$8.00	$2.25	$3.00	$4.00
Special Cycle Price	$1.50	$2.25	$2.75	$3.75	$4.75	$5.75	$7.75	$2.00	$2.75	$3.75

Special Pricing

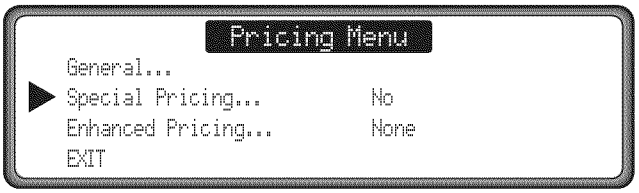
Special pricing functions as a second price. The wash computer contains a clock that keeps track of the time and day of the week.

A special price can be selected for each day of the week and for a specific time period.

Special price settings are stored through the Special Pricing Menu.

To enter the Special Pricing mode:

1. Make sure power is ON and no program is running.
2. Turn the key switch to SERVICE – SET-UP MODE. The Main Menu will be displayed.
3. Press ▼ to select the Pricing Menu. Press ENTER.
4. Press ▼ to select the Special Pricing Menu.



5. Press ENTER.

Special Pricing Menu Options and Defaults

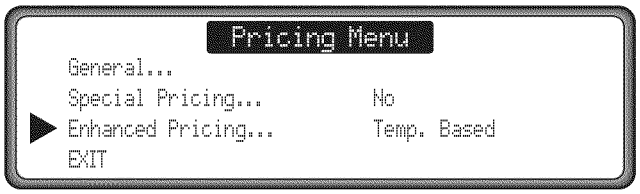
Menu Item	Description	Default	Range
Today is :	Actual Day of week	Sunday	Sunday–Saturday
Hour :	Actual Clock Hour	00	0–23
Minutes :	Actual Clock Minutes	00	0–59
Spec Price Start Hour :	Start Hour Special Price	0	0–23
Spec Price Stop Hour :	Stop Hour Special Price	0	0–23
Sunday Spec Price ?	Day of week Special Price switched on	No	No/Yes
Monday Spec Price ?	Day of week Special Price switched on	No	No/Yes
Tuesday Spec Price ?	Day of week Special Price switched on	No	No/Yes
Wednesday Spec Price ?	Day of week Special Price switched on	No	No/Yes
Thursday Spec Price ?	Day of week Special Price switched on	No	No/Yes
Friday Spec Price ?	Day of week Special Price switched on	No	No/Yes
Saturday Spec Price ?	Day of week Special Price switched on	No	No/Yes
Exit	Return to Main Menu		

Enhanced Pricing: Temperature-Based

Temperature-Based Enhanced Pricing is stored through the Temperature-Based Enhanced Pricing Menu.

To enter the Enhanced Pricing mode:

1. Make sure power is ON and no program is running.
2. Turn the key switch to SERVICE – SET-UP MODE. The Main Menu will be displayed.
3. Press ▼ to select the Pricing Menu. Press ENTER.
4. Press ▼ to select the Enhanced Pricing Menu.



5. Press ENTER.

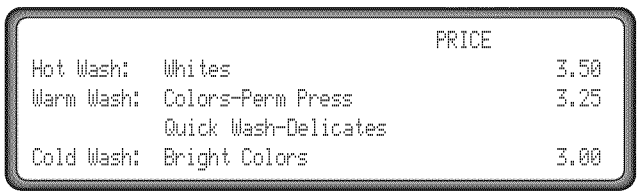
Temperature-Based Enhanced Pricing Menu Options and Defaults

Menu Item	Description	Default	Range
Regular Hot Price	Temperature Based Price	*	0.00–99.95
Regular Warm Price	Temperature Based Price	*	0.00–99.95
Regular Cold Price	Temperature Based Price	*	0.00–99.95
Special Hot Price	Temperature Based Price	*	0.00–99.95
Special Warm Price	Temperature Based Price	*	0.00–99.95
Special Cold Price	Temperature Based Price	*	0.00–99.95

* depends on washer size (see Default Prices chart below)

A different price can be set for Cold, Warm, and Hot.
For special prices, three (3) more prices can be set.

Example: Temperature-Based Wash Cycle Selection



Default Prices

Prices	MFR18	MFR25	MFR30	MFR40	MFR50	MFR60	MFR80	MFS18	MFS25	MFS35
Regular Hot Price	$1.75	$2.50	$3.00	$4.00	$5.00	$6.00	$8.00	$2.25	$3.00	$4.00
Regular Warm Price	$1.50	$2.25	$2.75	$3.75	$4.75	$5.75	$7.75	$2.00	$2.75	$3.75
Regular Cold Price	$1.25	$2.00	$2.50	$3.50	$4.50	$5.50	$7.50	$1.75	$2.50	$3.50
Special Hot Price	$1.50	$2.25	$2.75	$3.75	$4.75	$5.75	$7.75	$2.00	$2.75	$3.75
Special Warm Price	$1.25	$2.00	$2.50	$3.50	$4.50	$5.50	$7.50	$1.75	$2.50	$3.50
Special Cold Price	$1.00	$1.75	$2.25	$3.25	$4.25	$5.25	$7.25	$1.50	$2.25	$3.25

Enhanced Pricing: Upgrade-Based

Upgrade-Based Enhanced Pricing is stored through the Upgrade-Based Enhanced Pricing Menu.

To enter the Enhanced Pricing mode:

1. Make sure power is ON and no program is running.
2. Turn the key switch to SERVICE – SET-UP MODE. The Main Menu will be displayed.
3. Press ▼ to select the Pricing Menu. Press ENTER.
4. Press ▼ to select the Enhanced Pricing Menu.

5. Press ENTER.

Upgrade-Based Enhanced Pricing Menu Options and Defaults

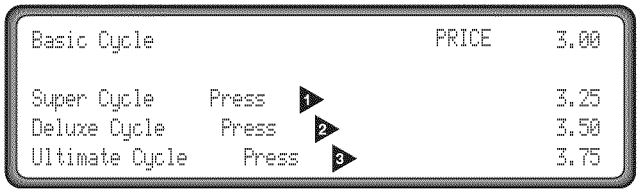
Menu Item	Description	Default	Range
Upgrade Value	Upgrade Reference Value	0.25	0.00–12.75
Super Cycle Display?	Show Super Cycle Upgrade	Yes	No/Yes
Sup. Cycle Prewash?	Super Cycle Extra Function	No	No/Yes
Sup. Cycle Extend. Wash?	Super Cycle Extra Function	Yes	No/Yes
Sup. Cycle Extra Rinse?	Super Cycle Extra Function	Yes	No/Yes
Sup. Cycle Extend. Spin?	Super Cycle Extra Function	No	No/Yes
Sup. Cycle + Detergent?	Super Cycle Extra Function	No	No/Yes
Sup. Cycle + Softener?	Super Cycle Extra Function	No	No/Yes
Super Cycle Price	Price for a Super Cycle Upgrade	0.25	0.00–99.95
Deluxe Cycle Display?	Show Deluxe Cycle Upgrade	Yes	No/Yes
Del. Cycle Prewash?	Deluxe Cycle Extra Function	No	No/Yes
Del. Cycle Extend. Wash?	Deluxe Cycle Extra Function	Yes	No/Yes
Del. Cycle Extra Rinse?	Deluxe Cycle Extra Function	Yes	No/Yes
Del. Cycle Extend. Spin?	Deluxe Cycle Extra Function	Yes	No/Yes
Del. Cycle + Detergent?	Deluxe Cycle Extra Function	No	No/Yes
Del. Cycle + Softener?	Deluxe Cycle Extra Function	No	No/Yes
Deluxe Cycle Price	Price for a Deluxe Cycle Upgrade	0.50	0.00–99.95
Ultimate Cycle Display?	Show Ultimate Cycle Upgrade	Yes	No/Yes
Ultimate Cycle Prewash?	Ultimate Cycle Extra Function	Yes	No/Yes
Ult. Cycle Extend. Wash	Ultimate Cycle Extra Function	Yes	No/Yes
Ult. Cycle Extra Rinse?	Ultimate Cycle Extra Function	Yes	No/Yes
Ult. Cycle Extend. Spin?	Ultimate Cycle Extra Function	Yes	No/Yes
Ult. Cycle + Detergent?	Ultimate Cycle Extra Function	No	No/Yes
Ult. Cycle + Softener?	Ultimate Cycle Extra Function	No	No/Yes
Ultimate Cycle Price	Price for an Ultimate Cycle Upgrade	0.75	0.00–99.95

Enhanced Pricing: Upgrade-Based (cont.)

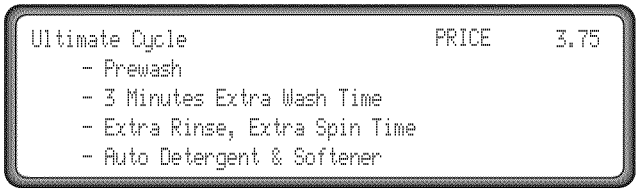
Upgrade-Based Prices allows the customer to select extra wash cycle functions.

For each upgrade "Super Cycle," "Deluxe Cycle," and "Ultimate Cycle," up to six (6) functions can be selected.

Example: Upgrade-Based Enhanced Pricing Wash Cycle Selection



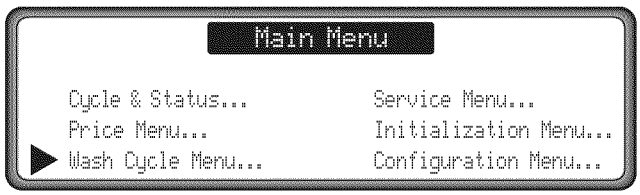
Example: If the upgrade is selected (these are not the default values)



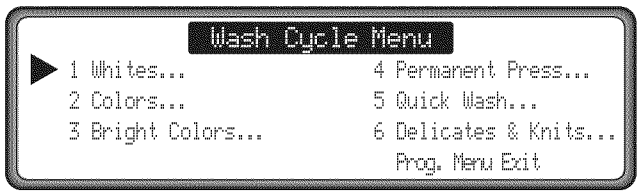
WASH CYCLE MENU

Entering the Wash Cycle Menu

1. Make sure power is ON and no program is running.
2. Turn the key switch to SERVICE – SET-UP MODE. The Main Menu will be displayed.
3. Press ▼ to select the Wash Cycle Menu. Press ENTER.



At the Wash Cycle Menu, select the Wash Cycle you want to edit and press ENTER.



At the Edit Step Menu, select the Wash Cycle step you want to edit and press ENTER.

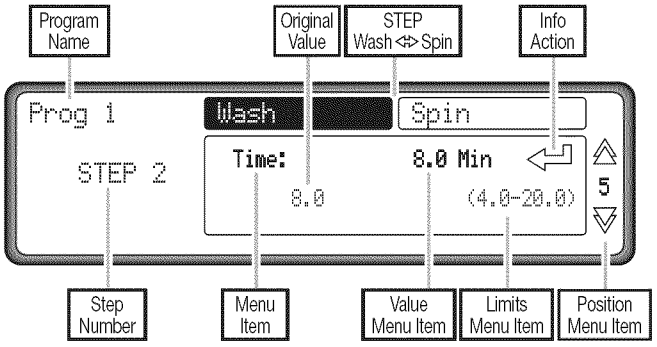
There are five (5) Wash Cycle steps:

1. Pre-Wash
2. Wash
3. Rinse
4. Rinse
5. Final Rinse

If the programmed time of the Wash/Drain steps is "0," the Wash/Drain step will be skipped.

Some functions will be activated automatically during upgrade cycles, even if they are disabled during standard wash cycles.

Editing a Wash Cycle



- Each program step contains a Wash-Rinse part and a Drain-Spin part (see labels at top of the screen).
- With the ▲ and ▼ buttons, you can scroll through the menu items without making changes. First the Wash-Rinse menu items are shown, then the Drain-Spin menu items are shown.
- At the menu item you want to modify, with the ◀ and ▶ buttons you can adjust the value.
- When you change the value, the value range is shown in brackets. You can only change the value within this range.
- Press ENTER to save your changes, or ESCAPE if you want to keep the previous setting.
  - Select Exit or press ESCAPE if you want to return to a higher menu level.
  - Turn the Service Switch back to the Run mode when you have finished.

Menu Items

Time

- The programmed time of the Wash-Rinse or Drain-Spin sequence
- The time to fill the tub with water is not included in the programmed time of the Wash-Rinse Sequence as the filling can be fast or very slow.
- When "time = 0" is programmed, the corresponding sequence will be skipped.

Water Temperature in Tub

- During the water fill sequence, the cold and hot water is mixed by the wash computer to obtain the programmed wash temperature. The temperature probe reads the temperature of the water in the drum.

Water Level

- The wash cycle is programmed with default Water Level settings Normal Low, and Normal High as shown in Table A-2 (see Appendix).
- The water consumption table shows the relation between water level and water consumption.

Liquid Soap Supply

- For washers equipped with an external Liquid Soap Supply, the time value for the Liquid Soap Signal can be set to activate the corresponding pump, or to give a pulse to start the external liquid Soap Supply computer.

Spin Speed

- At Final Spin you can adjust the maximum Spin Speed.

OPERATION MENU

Starting Up

IMPORTANT:

- Before starting up the first time, make sure the washer is properly installed. See Installation Instructions.
- Wash cycles can be started only when the key switch is in the Run mode.

Switching on Power

1. The display lights up when you switch on the power.
2. The Price of the wash cycle is shown. (There are different Pricing modes—see Pricing Menu.)
3. If the cycle is ready to be started (Cycle Price Paid), "SELECT CYCLE" is displayed.

NOTE: Washer needs to be loaded before selecting a cycle, as the door will lock after the selection.

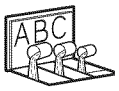
Loading Washer

Open the door and load the laundry into the drum. When the drum is loaded, close the door.

Putting Soap Into Wash Dispenser

1. Put the correct amount of soap into soap dispenser compartments A and B.
2. Put the correct amount of softener into soap dispenser compartment C.

Paying



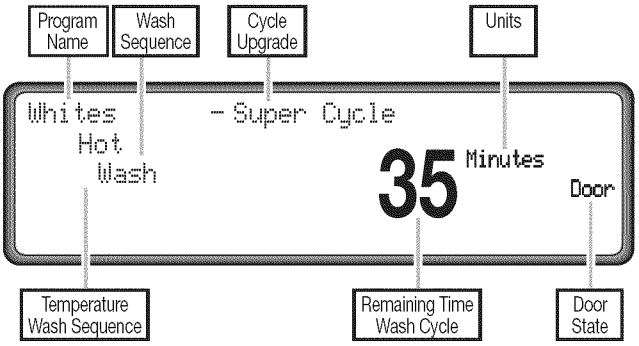
1. Insert coins until "SELECT CYCLE" is displayed.
2. Use the Debit Card for the payment procedure until "SELECT CYCLE" is displayed.

Starting Wash Cycle

1. Press one of the six (6) wash cycle buttons to start the wash cycle.
   – If the door is not closed, the message "CLOSE DOOR" will be shown.
2. Close the door and press one of the six (6) wash cycle buttons to start the wash cycle.
   – If you have selected the incorrect cycle, the cycle can be changed until the first fill of the cycle is completed.

The Active Program

- The cycle time will decrease minute by minute and gives an approximate indication of how long it will take before the cycle is finished. Fill time is not included in the estimate.
- For each Wash Program Step :
  – First you will see the Wash/Rinse Sequence.
  – Then you will see the Drain/Extraction Sequence.



Advancing or Stopping a Wash Cycle

While the cycle is running, you can Stop or Advance a wash cycle.

Stop: Terminate the wash cycle (with extra request for confirmation to stop or continue the wash cycle).

Advance: Skip the current sequence and go to the next sequence.

1. Turn the Service Switch to the SERVICE – SET-UP MODE. The Main Menu will be displayed.
2. Press ENTER to select Cycle & Status in the Main Menu.
3. A pop-up menu appears so that you can select Advance or Stop.
4. Press ▼ if you want to select Advance. Press ENTER.
5. Turn the key switch back to the Run Mode after you have finished the intervention.

Cycle-Status

At the Status Menu, you can check the water temperature and water level in the tub and consult the actual washer states for diagnostic purposes. (Press ENTER to see the current Status.)

1. Turn the Service Switch to the SERVICE – SET-UP MODE. The Main Menu will be displayed.
2. Press ENTER to select Cycle & Status in the Main Menu.
3. A pop-up menu appears so that you can select Advance or Stop.
4. Press ▼ to select Status. Press ENTER.
5. With the ▲ and ▼ buttons, you can scroll the screens.

Wash Time

- Once the program has been started, the remaining cycle time is displayed (less fill time).
- The total wash time = programmed time (1) + the extra time (2+3+4):
  1. The programmed time of the processes
  2. The extra time for adding water
  3. The extra time for draining (if the water is not drained in 30 seconds and the extended drain time is started)
  4. The coast-down time at the end of the Spin Sequence

Program End

1. The time on the display counts down until 0.
2. The door lock will be released. You can open the door when UNLOCK picture appears on the display.
3. Open the door and unload the washer.
4. The Message "THANK YOU FOR USING MAYTAG WASHERS" is shown. When it disappears, the washer is ready to start a new wash cycle.

Water Fill Process

- The cold and hot inlet valves will be opened, depending on the target water temperature.
- The water level is measured by an electronic water level sensor.
- The Temperature Balance function, in the MCG Wash Computer, will control the water temperature until the target temperature is reached. If water temperature in the washer does not reach the temperature chosen in the program, check water heater temperature setting.
- In the standard wash tables you will find a Normal Low and Normal High water level.
- The standard water levels are:
  - The Normal Low Water Level, used for the Prewash and Wash Sequence.
  - The Normal High Water Level, used for the Rinse and Final Rinse Sequence.

Wait State

If power has been switched off and on during a wash cycle, you may have to wait until the MCG Wash Computer allows you to continue. This wait state is indicated when "WAIT" and a decreasing counter are displayed. Because the software does not know how fast the motor was spinning, there is a delay before the washer can be restarted.

How To Handle Failure Messages

- When a failure has been detected by the MCG Wash Computer, a failure message is generated to inform the operator about the problem.

XX: The Program number

YY: The Step number

UNLOAD: If the door can be opened, the message "Unload" is displayed.

D ZZZ: The Diagnostic or Help code

Fault Message: The name of the Diagnostic message

Safety conditions:

- If there is still water in the drum or if the temperature is too high, it is not possible to open the door.
- The messages "WATER IN CAGE" or "TOO HOT" will be displayed together with the level and the temperature.

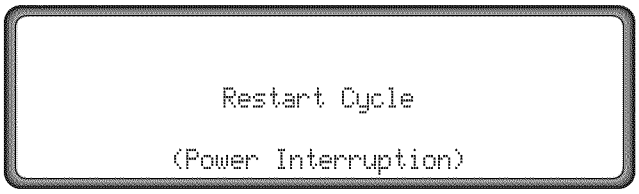
IMPORTANT: The operator is responsible for taking the necessary precautions if the drain valve is not functional and hot water remains in the tub at the end of the wash cycle. The actual water temperature and level will be displayed. Wait until the water is drained and has cooled before taking any action, as hot water can cause burns.

- If something goes wrong with the door lock, the program will end immediately.
- For safety purposes, the door will stay locked.

IMPORTANT: See Troubleshooting for more information about error handling.

How To Handle Power Interruptions

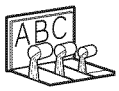
- When a power interruption occurs while the washer is in standby mode and no program cycle was started, the washer will stay in standby mode.
- When a power interruption occurs while the washer is washing or spinning, after the power interruption, the wash computer will show a message to restart the interrupted wash cycle.
  - Press the button of the interrupted wash cycle to restart the cycle.



PRE-PROGRAMMED WASH PROGRAMS

The MCG Wash Computer contains six (6) pre-programmed standard wash programs.

Legend



Water Inlet Valves

Valve **1**	Cold	Flush softener dispenser during final rinse (C)
Valve **2**	Cold	Flush pre-wash compartment (A)
Valve **3**	Hot	Direct Inlet at soap dispenser
Valve **4**	Hot	Flush main wash soap compartment (B)
Valve **5**	Cold	Flush main wash soap compartment (B)
Valve **6**	Cold	Direct Inlet at soap dispenser

Water Level

E: Empty – open drain

NL: Normal Low level

NH: Normal High level

Tub Action – RPM

W: Washing Speed

D: Distribution speed

L: Low extraction speed, depends on the ramp and time (approximately 1/2 of maximum RPM)

H: High extraction speed

WASH PROGRAMS

Whites Cycle

Steps	Valves	Preset Water Temperature	Water Level	Time	Tub Action (RPM)	Soap Signal
Pre-Wash	hot 3 cold 2	113°F (45°C) **100°F (38°C)** 90°F (32°C)	NL	(10 min) **0 min** (0 min)	W (Normal)	Soap 1 (10 sec)
Drain	–	–	E	(0.5 min) **0 min** (0 min)	W (Normal)	–
Wash	hot 3, 4 cold 5	180°F (82°C) **112°F (45°C)** 110°F (43°C)	NL	(20 min) **8 min** (4 min)	W (Normal)	Soap 1 (10 sec)
Drain + spin	–	–	E	1 min	L	–
Rinse (1)	cold 2, 5, 6	–	NH	1 min	W (Normal)	Soap 2 (10 sec)
Drain + Spin	–	–	E	1 min	L	–
Rinse (2)	cold 2, 5, 6	–	NH	(1 min) **0 min** (0 min)	W (Normal)	–
Drain + Spin	–	–	E	(1 min) **0 min** (0 min)	L	–
Final Rinse (3)	cold 1, 6	–	NH	2 min	W (Normal)	Soap 3 (10 sec)
Drain + Spin	–	–	E	(10 min) **5.5 min** (3 min)	H	–
Slow down	–	–	E	–	–	–
Tumble	–	–	E	30 sec	W (Normal)	–

Colors Cycle

Steps	Valves	Preset Water Temperature	Water Level	Time	Tub Action (RPM)	Soap Signal
Pre-Wash	hot 3 cold 2	113°F (45°C) **100°F (38°C)** 70°F (21°C)	NL	(10 min) **0 min** (0 min)	W (Normal)	Soap 1 (10 sec)
Drain	–	–	E	(0.5 min) **0 min** (0 min)	W (Normal)	–
Wash	hot 3, 4 cold 5	120°F (49°C) **75°F (24°C)** 70°F (21°C)	NL	(20 min) **8 min** (4 min)	W (Normal)	Soap 1 (10 sec)
Drain + spin	–	–	E	1 min	L	–
Rinse (1)	cold 2, 5, 6	–	NH	1 min	W (Normal)	Soap 2 (10 sec)
Drain + Spin	–	–	E	1 min	L	–
Rinse (2)	cold 2, 5, 6	–	NH	(1 min) **0 min** (0 min)	W (Normal)	–
Drain + Spin	–	–	E	(1 min) **0 min** (0 min)	L	–
Final Rinse (3)	cold 1, 6	–	NH	2 min	W (Normal)	Soap 3 (10 sec)
Drain + Spin	–	–	E	(10 min) **5.5 min** (3 min)	H	–
Slow down	–	–	E	–	–	–
Tumble	–	–	E	30 sec	W (Normal)	–

Bright Colors Cycle

Steps	Valves	Preset Water Temperature	Water Level	Time	Tub Action (RPM)	Soap Signal
Pre-Wash	cold 2, 6	75°F (24°C) **34°F (1°C)** 34°F (1°C)	NL	(10 min) **0 min** (0 min)	W (Normal)	Soap 1 (10 sec)
Drain	–	–	E	(0.5 min) **0 min** (0 min)	W (Normal)	–
Wash	cold 5, 6	75°F (24°C) **34°F (1°C)** 34°F (1°C)	NL	(20 min) **8 min** (4 min)	W (Normal)	Soap 1 (10 sec)
Drain + spin	–	–	E	1 min	L	–
Rinse (1)	cold 2, 5, 6	–	NH	1 min	W (Normal)	Soap 2 (10 sec)
Drain + Spin	–	–	E	1 min	L	–
Rinse (2)	cold 2, 5, 6	–	NH	(1 min) **0 min** (0 min)	W (Normal)	–
Drain + Spin	–	–	E	(1 min) **0 min** (0 min)	L	–
Final Rinse (3)	cold 1, 6	–	NH	2 min	W (Normal)	Soap 3 (10 sec)
Drain + Spin	–	–	E	(10 min) **7 min** (3 min)	H	–
Slow down	–	–	E	–	–	–
Tumble	–	–	E	30 sec	W (Normal)	–

Permanent Press Cycle

Steps	Valves	Preset Water Temperature	Water Level	Time	Tub Action (RPM)	Soap Signal
Pre-Wash	hot 3 cold 2	113°F (45°C) **100°F (38°C)** 70°F (21°C)	NL	(10 min) **0 min** (0 min)	W (Normal)	Soap 1 (10 sec)
Drain	–	–	E	(0.5 min) **0 min** (0 min)	W (Normal)	–
Wash	hot 3, 4 cold 5	120°F (49°C) **75°F (24°C)** 70°F (21°C)	NL	(20 min) **8 min** (4 min)	W (Normal)	Soap 1 (10 sec)
Drain + spin	–	–	E	1 min	D	–
Rinse (1)	cold 2, 5, 6	–	NH	1 min	W (Normal)	Soap 2 (10 sec)
Drain + Spin	–	–	E	0.5 min	D	–
Rinse (2)	cold 2, 5, 6	–	NH	(1 min) **0 min** (0 min)	W (Normal)	–
Drain + Spin	–	–	E	(1 min) **0 min** (0 min)	D	–
Final Rinse (3)	cold 1, 6	–	NH	2 min	W (Normal)	Soap 3 (10 sec)
Drain + Spin	–	–	E	(10 min) **4.5 min** (3 min)	H	–
Slow down	–	–	E	–	–	–
Tumble	–	–	E	30 sec	W (Normal)	–

Quick Wash Cycle

Steps	Valves	Preset Water Temperature	Water Level	Time	Tub Action (RPM)	Soap Signal
Pre-Wash	hot 3 cold 2	113°F (45°C) **100°F (38°C)** 70°F (21°C)	NL	(10 min) **0 min** (0 min)	W (Normal)	Soap 1 (10 sec)
Drain	–	–	E	(0.5 min) **0 min** (0 min)	W (Normal)	–
Wash	hot 3, 4 cold 5	120°F (49°C) **75°F (24°C)** 70°F (21°C)	NL	(20 min) **4 min** (4 min)	W (Normal)	Soap 1 (10 sec)
Drain + spin	–	–	E	1 min	L	–
Rinse (1)	cold 2, 5, 6	–	NH	(1 min) **0 min** (0 min)	W (Normal)	Soap 2 (10 sec)
Drain + Spin	–	–	E	(1 min) **0 min** (0 min)	L	–
Rinse (2)	cold 2, 5, 6	–	NH	(1 min) **0 min** (0 min)	W (Normal)	–
Drain + Spin	–	–	E	(1 min) **0 min** (0 min)	L	–
Final Rinse (3)	cold 1, 6	–	NH	2 min	W (Normal)	Soap 3 (10 sec)
Drain + Spin	–	–	E	(10 min) **5.5 min** (3 min)	H	–
Slow down	–	–	E	–	–	–
Tumble	–	–	E	30 sec	W (Normal)	–

Delicates & Knits Cycle

Steps	Valves	Preset Water Temperature	Water Level	Time	Tub Action (RPM)	Soap Signal
Pre-Wash	hot 3 cold 2	113°F (45°C) **100°F (38°C)** 70°F (21°C)	NH	(10 min) **0 min** (0 min)	W (Gentle)	Soap 1 (10 sec)
Drain	–	–	E	(0.5 min) **0 min** (0 min)	W (Gentle)	–
Wash	hot 3 cold 5, 6	120°F (49°C) **70°F (21°C)** 70°F (21°C)	NH	(20 min) **8 min** (4 min)	W (Gentle)	Soap 1 (10 sec)
Drain + spin	–	–	E	1 min	L	–
Rinse (1)	cold 2, 5, 6	–	NH	1 min	W (Gentle)	Soap 2 (10 sec)
Drain + Spin	–	–	E	0.5 min	D	–
Rinse (2)	cold 2, 5, 6	–	NH	(1 min) **0 min** (0 min)	W (Gentle)	–
Drain + Spin	–	–	E	(1 min) **0 min** (0 min)	D	–
Final Rinse (3)	cold 1, 6	–	NH	2 min	W (Gentle)	Soap 3 (10 sec)
Drain + Spin	–	–	E	(10 min) **3.5 min** (3 min)	H	–
Slow down	–	–	E	–	–	–
Tumble	–	–	E	30 sec	W (Normal)	–

TROUBLESHOOTING

Display Messages

Various messages may appear on the display at the start, during, or at the end of a washing cycle. When an error occurs, the washer will automatically go to a normal state. With the diagnostic program you can determine the problem. The diagnostic program will test the individual functions of the washer one by one.

Fault Messages

- If a failure occurs the computer will display a diagnostic error message.
- The program number and step at which the interruption has occurred are displayed.
- The fault message contains a number and a corresponding text label to easily locate the related information in the manual.
- If UNLOAD is displayed, the door can be opened.

XX: the program number

YY: the program step number

UNLOAD: the door can be opened

D ZZZ: the number of the displayed diagnostic or help message

Fault Message: the text label of the diagnostic message

How to Handle Fault Messages

NOTES:

- Check the diagnostic or help code information in this section to determine the nature of the problem.
- Ask for an experienced technician's assistance to solve the problem.
- All relevant safety precautions must be followed before proceeding.

You can override and erase fault messages by:

- Pressing the ENTER button (key switch in Service – Set-Up mode
- Switching the power off/on
- Opening the door (D3 and D21)

  For safety reasons, the door will not be unlocked if:

  – There is still water in the drum

  – The water temperature is above 130°F (54°C)

  – The drum is still turning (for safety reasons, the door will not unlock until the drum comes to a complete stop)

  – There is a problem with the door lock system
- At the end of the cycle, the MCG Wash computer will perform a safety test sequence.

  If at the end of the cycle the safety conditions are not met, the display will show TOO HOT or WATER IN CAGE.

- If the cause has corrected itself—for example, the water has dropped below the required level for spin or the water temperature has dropped below 130°F (54°C)—the error messages TOO HOT or WATER IN CAGE will disappear automatically.

IMPORTANT: It is the operator's responsibility to take the necessary actions if the drain valve does not function and if there is still hot water in the tub at the end of the wash cycle. The actual water temperature and level will be displayed. Wait until the water drains or is cooled before any intervention is performed because hot water can cause severe burns.

The computer will begin a specific routine depending on the failure type:

- WHEN SAFETY IS INVOLVED:
  - Full stop + tumble:
    - The program is stopped but will run the tumble sequence
  - Full stop + safety:
    - The program is stopped and a safety time is started
  - Do not start:
    - The program cannot be started as long as the safety conditions are not fulfilled.
- WHEN SAFETY IS NOT INVOLVED:
  - Full stop + request for continue:
    - A request to Continue ? the program is displayed.
  - Skip + continue:
    - The actual cycle step is skipped and the program continues with the next step.
  - Continue:
    - The program continues.

Special cases:

- **D 1:** Defective Water Level Sensor

  D 2: Defective Temperature Sensor

  Err 35: Incorrect software version

  => The Failure message can ONLY be erased by loading Factory Settings and switching the power off and back on.
- **H 63:** Initialization fault – Inverter

  H 64: Verification fault – Inverter

  => The Help message can be erased by switching off the power.

  => H 63 and H 64 indicate that the Frequency Inverter is not loaded with the correct parameter settings, the washer can become damaged when the Inverter is functioning with the incorrect settings.

  NOTE: Do not use the washer before a technician has inspected the problem.
- **D 3:** Service Due

  => A symbol will appear on the display when a Service Due has to be performed.

  See Service Menu for instructions on how to reset the cycle counter.

Diagnostic Messages

Code	Message	Failure	Action	Fault Occurrence
D1	Water Level Sensor	Defective level sensor	Continue + Do not start	Before start up
D2	Temperature Sensor	Defective temperature sensor	Continue + Do not start	Before start up
D3	Service Due	Service Due Alert	Symbol For Info only	End cycle
D4	Door Sense Fault	Door switch failure	Full stop + safety time	Whole cycle
D5	Coin 1 Drop Blck	Coin Drop 1 Blocked	Do not start	At start up
D6	Door Unload	Door lock switch closed failure	Do not start	End cycle
D7	Slow Fill Detect	Fill failure	Full stop + tumble	While filling
D8	Slow Drain Detect	Drain failure	Skip + continue	Draining sequence
D9	–	–	–	–
D10	Dr Lock Sense	Door solenoid switch failure	Full stop + safety time	Whole cycle
D11	Motor Speed Err	(*)		
D12	Motor Sense Flt	(**)		
D13	Coin 2 Drop Blck	Coin Drop 2 Blocked	Do not start	At start up
D14	Door Start	Door lock check at start failure	Do not start	At start up
D15	Overfill	Overfill failure	Full stop + tumble	While filling
D16	Comm Debt Crd Flt	No Debit Card Reader Communication	Do not start	At start up
D17	Door Fail Lock	Bimetal/Spring	Continue	Check 2 min after start cycle
D18	Memory Err	Memory Error	Full stop + safety time	Any time
D19	Softw Err	Software Error	Full stop + safety time	Any time
D20	Tilt Fault	Out of balance: Before spin	Full stop + tumble	Start spin
D21	Imbalance	Out of balance: Normal spin	Skip + continue	After 10 x tilt
D22	Tilt High Spin	Out of balance: high spin	Full stop + safety time	>500 or 750 RPM
D23	–	–	–	–
D24	–	–	–	–

Help Messages

Code	Message	Failure	Action	Fault Occurrence
H50	Too Hot	Too Hot	Full stop + tumble	While heating
H51	Overflow	Overflow failure	Full stop + tumble	Wash step
H52	Wrong Input	Input tilt must always be low	Do not start	Start Cycle
H53	RS7 Select	MFR18 selected in case of MFR25	Do not start	Start Cycle
H54	RS10 Select	MFR25 selected in case of MFR18	Do not start	Start Cycle
H55	Slow Refill	Refill failure	Continue	While filling
H56	No Int. Clock	No Internal Clock	Continue	At power up
H57	No Sign Spin	No detection motor speed signal at spin	Full stop + tumble	Spin sequence
H58	Lock Active	At standby door lock is locked although door is open	Do not start	At Standby
H59	Lock Start	After pressing Start door lock is locked although door is open	Do not start	At Start Cycle
H60	Mitsubishi Code	Undefined Frequency Inverter error code	Full stop + tumble	Start Cycle
H61	THT time	THT Time out	Full stop + safety time	At spin sequence
H62	OV3 time	OV3 Time out	Full stop + safety time	At spin sequence
H63	Load Parr	Initialization Fault Inverter	Do not start	At initialization
H64	Verify Parr	Verification fault of the Inverter	Do not start	At loading parameters
H65	Stall prev	Stall avoidance function active	Continue	At spin sequence
H66	Wrong Voltage Par	Wrong Voltage Range Selection	Make correct selection	Configuration Menu
H67	Wrong Model Type	Wrong Inverter Model Type	Make correct selection	Configuration Menu
H71	Polling	Polling out of sequence	Stop Card Reader Interfacing	At the Card Reader Communication Process
H74	Remaining Balance	Remaining Balance out of sequence	Stop Card Reader Interfacing	At the Card Reader Communication Process
H75	New Card Balance	New Card Balance out of sequence	Stop Card Reader Interfacing	At the Card Reader Communication Process
H76	Money Off	Money Off out of sequence	Stop Card Reader Interfacing	At the Card Reader Communication Process
H88	Invalid Messaging	Invalid messaging State	Stop Card Reader Interfacing	At the Card Reader Communication Process

Error Messages

Code	Message	Failure	Action	Fault Occurrence
E35	Wrong Softw	Wrong software version	Do not start	New software version
E300–E399	MITS ERR	Specific Mitsubishi Inverter Alarm	Full stop + safety time	Whole cycle
E500–E599	MEMORY ERR	Memory Error	Full stop + safety time	Any time
E600–E699	SOFTW ERR	Software Error	Full stop + safety time	Any time

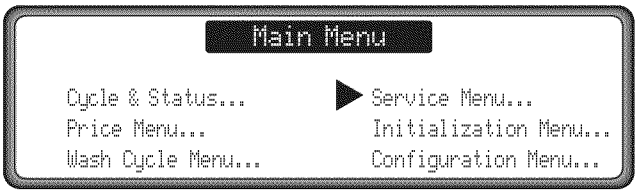
Service Menu

In the Service Menu you have some extra utilities:

- Start a Cycle Credit.
- The Software Version Number
- An overview of the 20 last failure messages
- Statistics for nine (9) general diagnostic messages
- Pulley ratio
- An overview of the input states
- Switching on the Motor Drive for a technical intervention
- Reset Cycle Counter and Statistics Diagnostic Messages

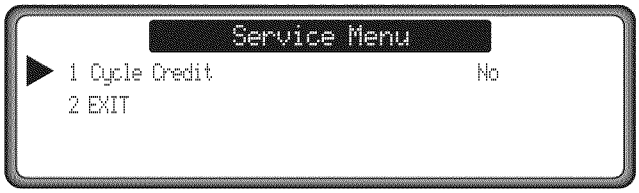
How to Get into the Service Menu

1. Make sure power is ON and no program is running.
2. Turn the key switch to SERVICE – SET-UP MODE. The Main Menu will be displayed.
3. Press ▼ to select the Service Menu. Press ENTER.



- The software version is prominently displayed on the Service Menu. (This value cannot be selected or changed.) Write this information down on the back cover of this manual.

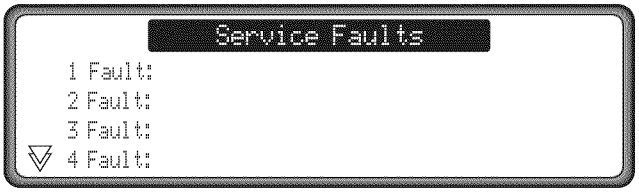
- The owner of the washer can start a Cycle Credit at the Service Menu (= without payment).



- The Faults Sub-Menu is displayed.

- Select View Fault Messages by pressing ENTER to see the 20 Fault messages kept in memory.

- There are a maximum of 20 Fault Messages kept in EEPROM memory:
  - Fault # 1: the most recent Diagnostic message displayed.
  - Fault # 2 : the Diagnostic message occurring prior to Fault # 1.
  - Fault # 20 : the Diagnostic message occurring prior to Fault # 19.
- **D XXX:** The Diagnostic message number
- **YYYYYYYYY:** The Diagnostic message name
- If no messages are displayed, this means that no Errors have occurred.



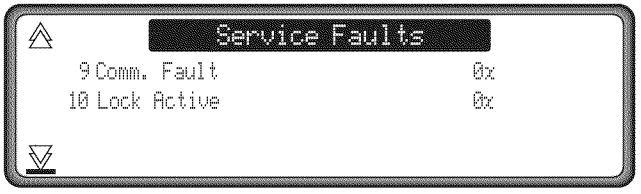
- Press YES and ENTER if you want to erase the Fault messages.

- The Fault Statistics are an accumulation of Diagnostic messages that have appeared over a long period.
- The Statistics can be reset at the Service Menu, by a Reset of the Cycle counter.
- With this information, the technician has an indication of what is in need of repair.

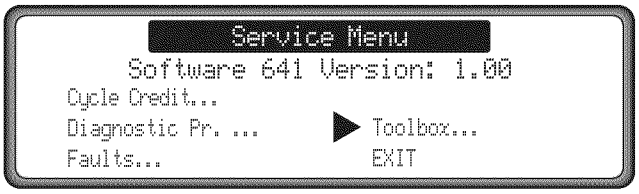
Fault Statistics (number of occurrences of faults listed by category):

Categories:

- No Drain: D8
- Door Switch: D6 + D4 + D10 + D14
- Bimetal/Spring: D17
- No Fill: D7
- Temperature Sensor: D2
- Level Sensor: D1
- Mitsubishi Alarm: D12 + H61 + H62 + H63
- SR Driver: D11 + D12
- Communication Fault Alarm: D11
- Lock Active



- The purpose of the Toolbox Menu is to give support during technical intervention.



- Input states let you verify the electrical signals into the wash computer.

- Input 1 : The State that corresponds with Input 1.
  Input 2 : The State that corresponds with Input 2.
  ...
  Input 16 : The State that corresponds with Input 16.
- The exact function of the inputs can be found on the electrical drawing of the MCG Washer.
- If the Input state is Off, the Input signal is low.
- If the Input state is On, the Input signal is high.

- For washers with Frequency Inverter Controlled motor only.
- Use this function to switch on the Inverter if technical intervention is needed.
- Select YES to switch on the Inverter.

IMPORTANT: The parameters of the Mitsubishi Frequency Inverter have been set by the manufacturer. The manufacturer is not responsible for poor washer performance if the owner has installed new parameter settings in the Inverter that do not correspond with the original factory settings.

- XX is the Pulley Ratio.
- You can check if the motor pulley and the drum pulley have the correct size by calculating the Pulley Ratio.
- This value should be approximately the same as the displayed value.
- This value cannot be changed.

- This display informs the operator that regular maintenance must be performed when the washer has reached the number of cycles that corresponds with the "Service Interval." A Service Due symbol will be shown until the Cycle Counter at the Service Menu has been reset.
- Also, the Statistics for Diagnostic messages will be reset by resetting the Cycle Counter.

- By selecting Yes, the Escrow will be reset to "0".
- The Escrow stores any overpayment the customer has made to start a wash cycle.

- By selecting Yes and by confirming "Are You Sure? Yes," the Cycle Count Menu Item will be shown in the Tool Box Menu.
- Once the Cycle Count Menu Item is shown, the Cycle Count Menu Item is hidden.

- The Cycle Count Menu Item displays the number of cycles that the washer has run.
- The Cycle Count Menu Item remains hidden until it has been selected.

- For future options it is possible to select a Model Code 11.
- Model Code 9 is the default value.

Diagnostic Cycle

The purpose of the diagnostic program is to test the washer functions one by one.

How to Get into the Diagnostic Menu

The Diagnostic Menu can only be started when the washer is in standby (the power is switched on, but no program is started).

First select the Diagnostic Program Sub-Menu in the Service Menu.

- If you want to start the diagnostic program, select YES and press the ENTER button.
- Press "ANY KEY" if you want to start the diagnostic program.

Test Sequence

- Display test and door lock test
- Sensor test
- Motor test
- Water fill and drain test
- BASIC Diagnostic Wash program

Diagnostic Test Sequence

Test #	Information	Explanation	
1	Black display followed by a Text display	Door lock test Display test	(locks and unlocks the door 5 times)
***	None	Sensor test	(all washer sensors are tested)
3	Reverse	Wash speed	(inverse direction high spin)
4	Stop	Standstill motor	
5	Forward	Wash speed	(same direction high spin)
6	Distribution	Distribution speed	(same direction high spin)
7	Low spin	Low spin speed	(same direction high spin)
	High spin	High spin speed	(the drum is turning away from the soap box)
8	Stop	Free run or controlled deceleration	
20	I1	The washer takes water by inlet 1	
21	Drain 1	The water is drained by drain valve 1	
22	I2	The washer takes water by inlet 2	
23	Drain 1	The water is drained by drain valve 1	
24	I3	The washer takes water by inlet 3	
25	Drain 1	The water is drained by drain valve 1	
26	I4	The washer takes water by inlet 4	
27	Drain 1	The water is drained by drain valve 1	
28	I5	The washer takes water by inlet 5	
29	Drain 1	The water is drained by drain valve 1	
30	I6	The washer takes water by inlet 6	
31	Drain 1	The water is drained by drain valve 1	
50	Tumble	The tumble sequence	
	Unload	End of the Diagnostic Cycle	

BASIC Diagnostic Wash Program

	Sequence		Supply		Inlet		Temp	Level	Wash action	Time	R.P.M.
	Top	Front	Top	Front	Top	Front					
Step 1	Wash	Wash	B	–	3-4-5	2-3	104°F (40°C)	NL	A=12 sec R=3 sec	6 min	W
	Drain	Drain	–	–	–	–	–	–	–	30 sec	D
Step 2	Rinse 1	Rinse 1	–	–	2-5-6	2	–	NH	A=12 sec R=3 sec	1.5 min	W
	Spin	Spin	–	–	–	–	–	–	–	1 min	L
Step 3	Final Rinse	Rinse 3	C	–	1(+6)	1 (2)	–	NL	A=12 sec R=3 sec	2 min	W
	Spin	Spin	–	–	–	–	–	–	–	4.5 min	H
	Slowdown		–	–	–	–	–	–	–	1 min	–
	Tumble		–	–	–	–	–	–	A=12 sec R=3 sec	30 sec	W

Diagnostic error messages:

If the computer detects a problem during the Diagnostic Help Program, a diagnostic error message is generated.
Also check the Diagnostic Error Log List in the Service Menu.
Check the error handling and explanation of the error messages.

Problem Check List

Problem	Cause	Solving the problem
When the power is switched on, the display is not illuminated. **Remark:** The display must always light up when the power connector is connected to the wash computer. (Flash Memory with software must be installed.)	• There is no external power. • The power connector is not connected on the board • The fuse on the MCG computer has blown. • Disconnect the input connector. • Check if the Flash Memory that contains the software is plugged into its socket on the wash computer.	• Switch on the external power supply. • Verify the external power to the washer. • Connect the power connector at P1. • If the transformer is broken, replace the MCG wash computer. • Check the wiring and the voltage at the power connector. If the transformer is still OK, change the fuse. • If the display is lighting up: Verify that the input signals or the +16Vdc Supply Signal are not touching the cabinet. • If there is no Flash Memory plugged into its socket on the wash computer, use the correct software on the wash computer.
The display is illuminated, but it is difficult to read the text on the display.	• The brightness is not set high enough.	• Change the value for Brightness in the Configuration Menu until you get a bright display.
The washer is not responding when the keyboard buttons are pressed.	• No button is functional and the key switch is in the right-hand position.	• Check if the connector "K" of the keyboard is properly connected.
The washer is not operating as expected.	• If the incorrect washer type is selected, the incorrect outputs will be activated.	• Check if the correct washer type is selected in the Configuration Menu.
A program is started, but the outputs are not activated.	• Check if connector "R" is connected.	• Connect the connector at the correct position.
Wait is displayed and a counter is counting down.	• This is a wait state caused by a power interruption or a safety sequence at the end of the process.	• Wait until the counter has reached "0". • Do not switch off/on the power again as you will restart the counter.
Unload is displayed and the door is open.	• Check if the "Door Switch" is still closed.	• If the "Door Switch" is broken, replace the "Door Switch."
The water level is incorrect. (The water level sensor may not be calibrated.)	• Check if the programmed water levels are the correct ones. • Check if the correct washer type is selected in the Configuration Menu. • You have changed the washer type, but the standard water levels do not change.	• Set the correct water levels. • Select the correct washer type in the Configuration Menu. • The standard water levels can only be reinitialized by programming new values or by loading the Standard Wash programs again.
The drum is not turning. (No error message will be generated.)	• Check if the belt is broken. • Check the applied motor voltage. • Check if the motor is still functional. • Check the Inverter.	• Check the tension of the belt or replace the belt. • Repair the motor power supply circuit. • Change the motor if needed. • Send a request for more information to Maytag.

DIAGNOSTIC CODE D1: DEFECTIVE LEVEL SENSOR

If the level sensor is broken, Diagnostic Code D1 will be displayed. The fault is only generated when the washer is in standby mode and no program is active.

The fault can only be erased by switching off and on the power.

DIAGNOSE (ERR 24):

1. Check the level sensor visually.	If you see some damage, replace the control board.
2. If the fault is persistent.	Replace the control board. (Be sure there is no drain problem.)

DIAGNOSTIC CODE D2: DEFECTIVE TEMPERATURE SENSOR

When the temperature sensor is broken, Diagnostic Code D2 will be displayed. The fault is only generated when the washer is in standby mode and no program is active. The fault can only be erased by switching off and on the power. If the fault is still available after switching on the power, fault 25 will be displayed again.

DIAGNOSE (ERR 25):

1. Check if the temperature sensor is connected on the control board.	The Female connector must be connected with the Male connector T of the control board.
2. Check the temperature sensor.	If the temperature sensor is broken, replace the temperature sensor.
3. Measure the resistance of the sensor.	If the resistance is not OK, replace the temperature sensor.
4. Check if the earth wire is at the middle position of the connector.	If the earth wire is not at the middle position, put the earth wire in the middle position of connector T.
5. Check the control board visually.	If you see some damage, replace the control board.
6. If the fault is persistent.	Replace the control board. Be sure that the problem is related to the control board and not to a defective temperature sensor.

DIAGNOSTIC CODE D3: SERVICE DUE ALERT

Diagnostic Code D3 occurs when the cycle counter of the Electronic timer has reached the Programmed Value for Service Due. A symbol will be displayed at the LCD display to warn the operator that a service due must be executed.

DIAGNOSE (ERR 41):

1. Check the cycle counter at the Toolbox Menu (Service Menu).	You can reset the cycle counter in the Service Menu.

DIAGNOSTIC CODE D4: DOOR SWITCH FAILURE

For safety reasons, while a process is running, the door lock system is scanned all the time.

If the controller detects that the “DOOR SWITCH” is not closed, the washer will immediately stop all its functions. The door will stay locked.

DIAGNOSE (ERR 6):

1. Check for proper function of the “DOOR SWITCH.” The “DOOR SWITCH” is a (normally open) open contact.	If the “DOOR SWITCH” is broken or malfunctions, replace the door switch.
2. Check the continuity of the wiring.	If the wiring is not continuous, repair the wiring.
3. Check the door switch input at the wash computer. (See Inputs at Toolbox Menu.)	If the wash computer input is not functional, replace the wash computer board.

DIAGNOSTIC CODE D5: COIN 1 BLOCKED

When the input for coin drop 1 is blocked for more than 15 seconds, diagnostic D5 will be displayed.

When the problem disappears, the diagnostic message will be cleared automatically.

Most likely the coin box is filled up completely with coins, which interrupts the infrared signal of the coin sensor. After removing these coins, the coin system will operate again in a normal way. In some cases a wire has strayed into the path of the coin sensor beam.

DIAGNOSE (ERR 16):

1. Check the function of the coin drop.	If the coin drop micro contract or optocoupler is not functioning at 100%, replace the coin drop.
2. Check the continuity of the wiring.	If the wiring is not continuous, repair the wiring.

DIAGNOSTIC CODE D6: DOOR SOLENOID SWITCH CLOSED FAILURE

If within 30 seconds the "DOOR SOLENOID SWITCH" does not change state at the end of the cycle:

Diagnostic Code D6 will be displayed. At the end of the cycle, the Door Lock coil is switched off and the "DOOR SOLENOID SWITCH" must open its contact. If the contact is broken and stays closed, the software will display a message that the door lock system is no longer functioning.

DIAGNOSE (ERR 9):

1. Check the functioning of the "DOOR SOLENOID SWITCH."	If the door switch is broken or does not function at 100%, replace the door lock switch.
2. Check the door lock coil.	If the door lock coil does not function, replace the door lock coil.
3. Check the mechanical function of the door lock.	If the door lock is not functioning mechanically, replace the door lock system.
4. Check the continuity of the wiring.	If the wiring is not continuous, repair the wiring.
5. Check the output relay that powers the door lock coil.	If the relay remains closed and the relay is broken, replace the power board.
6. Check the output relay that powers the door lock coil	If the relay is not broken but receives a "not allowed" signal from the control board, replace the control board.

DIAGNOSTIC CODE D7: FILL FAILURE

Diagnostic Code D7 occurs when the water level has not reached its target level in X minutes.
X = Max fill time, a value that can be programmed at the Initialization Menu.
IMPORTANT: The rubber hose must be attached with a fastener on the Electronic Water Level Sensor.

DIAGNOSE (ERR 11):

1. Check if the programmed Max fill time in the Initialization Menu is acceptable.	If the water flow is very slow, increase the value for the Max fill time. The default value is X minutes.
2. Check if the external water valves are open.	If the water valves are closed, open the water inlet valves.
3. Check if the water inlet valves are not blocked by dirt.	If the water inlet valves are blocked by dirt, clean the water inlet valves or replace the water inlet valves.
4. Check the coil of the water inlet valves.	If the coil of the water inlet valve is open, replace the coil or the complete water inlet valve.
5. Check the drain valve.	If the drain valve is defective, replace the drain valve.
6. Check if the rubber hose (for measuring the water level) is properly mounted on the electronic level sensor and on the drain valve.	If the hose is not properly mounted, install the rubber hose properly.
7. Check if the hose on the electronic sensor is air tight.	If the air hose is not air tight, replace the air tube. With a fastener, you can make the hose air tight at the level sensor.
8. Check if the hose does not contain water (works as a siphon).	If the air tube contains water, remove the water and fix the hose so that it does not work as a siphon.
9. Check the continuity of the wiring.	If the wiring is not continuous, repair the wiring.
10. Check the output relay that powers inlet valves and the drain valve.	If the relay receives a command signal but is not closed, replace the wash computer.

DIAGNOSTIC CODE D8: DRAIN FAILURE

Diagnostic Code D8 occurs when the electronic timer detects that the water is not drained after 3 minutes in a Drain or Spin Sequence. The failure message is displayed at the end of the cycle.

DIAGNOSE (ERR 2):

1. Check the drain tube of the washer.	If the drain tube is blocked, repair the drain tube.
2. Check the drain valve.	If the drain valve is defective, replace the drain valve.
3. Check the wiring: Check if the drain valve is switched OFF. The drain valve should be open.	If the wiring is damaged, repair the wiring.

DIAGNOSTIC CODE D10: DOOR SOLENOID SWITCH FAILURE

For safety reasons, the door lock system is scanned all the time.

If the washer detects that the "DOOR SOLENOID SWITCH" is not closed, the washer will immediately end all its functions. The door will stay locked.

DIAGNOSE (ERR 7):

1. Check the function of the "DOOR SOLENOID SWITCH." The "DOOR SOLENOID SWITCH" is a "NO (normally open) contact."	If the "DOOR LOCK SOLENOID SWITCH" is broken or does not function at 100%, replace the door lock system.
2. Check the door lock coil.	If the door lock coil does not function, replace the door lock coil.
3. Check the mechanical function of the door lock.	If the door lock is not functioning mechanically, replace the door lock system.
4. Check the continuity of the wiring.	If the wiring is not continuous, repair the wiring.
5. Check the door switch input at the MCG computer. (See Inputs at the Toolbox Menu.)	If the MCG computer input is not functional, replace the MCG computer board.

DIAGNOSTIC CODE D11: COMMUNICATION FAULT INVERTER

This fault will only occur when there is no communication between the electronic timer and the Inverter. The electronic timer is sending requests to the Inverter, and the Inverter is sending answers to the timer. If the electronic timer is not receiving the answers within 5 seconds, Diagnostic Code D11 will be displayed. The baud rate for the E500/D700 series Mitsubishi Inverters is 19200 (= RS485 communication) (MCG Wash Computer and Inverter have to communicate with the same baud rate.)

DIAGNOSE (ERR 27):

1. For a new Inverter or wash computer, check if the correct washer type and washer power supply have been selected.	When the Inverter parameters are loaded at the Configuration Menu, make sure that you have selected the correct washer type and washer power supply.
2. Check if the door is closed and locked.	If the door is not closed, the Inverter cannot be powered. Close the door. If the door lock is broken, repair the door lock system.
3. Check if the Inverter is energized.	Measure the voltage at the input of the Inverter.
4. Check if the fuses are still operational.	If the fuses are blown, replace the fuses.
5. Check if the safety contactor is activated.	If the safety contactor is broken, replace the contactor.
6. Check if the connectors on both sides of the communication cable are still connected.	Connect the connectors on the MCG computer and the Inverter.
7. Check the wiring for continuity.	Repair the wiring.
8. Check if the output relays that activate the Safety Inverter contactor are functional.	If the relay is broken, replace the MCG computer.

DIAGNOSTIC CODE D12: ALARM FREQUENCY INVERTER

Diagnostic Code D12 occurs when the Frequency Inverter goes into alarm mode. This code does not occur for the THT and the OV3 fault, which trigger the timer software to reset the Inverter automatically (only 1x). The active process will be interrupted immediately.

DIAGNOSE (ERR 30):

1. Check if the correct washer type is selected in the Configuration Menu.	If the incorrect washer type is selected, enter the correct washer type.
2. Check if the correct Inverter parameters have been implemented.	Load the correct Inverter parameters.
3. Check the Frequency Inverter error list to find the error.	If the fault continues, contact Maytag.

DIAGNOSTIC CODE D11–D12: PWM MOTOR DRIVE ERRORS AND PROBLEMS

D11 (E63, E64, E65) Drum does not turn (no reset drive)

D12 (E66) Extended Speed (no reset drive)

D12 (E67) Continue Spin (no reset drive)

The motor is spinning at 150 rpm.	The belt is broken. (When the belt is broken, the load is so small that the motor starts spinning at 150 RPM.)	Change the drive belt(s).
The motor is shaking.	Bad contact in motor or communication cable.	Check wiring and pin connectivity and repair the problem.
The drum is not able to spin at its maximum speed.	One (1) phase is missing.	Verify that the motor supply connector is properly connected.
The belt is slipping.	Check if the belt is wet.	Make sure that no water gets on the belt.

DIAGNOSTIC CODE D13: COIN 2 BLOCKED

When the input for coin drop 2 is blocked for more than 15 seconds, Diagnostic Code D13 will be displayed.

When the problem disappears, the Diagnostic message will be cleared automatically.

Most likely the coin box is filled up completely with coins, which interrupts the infrared signal of the coin sensor. After removing these coins, the coin system will work again in a normal way.

DIAGNOSE (ERR 17):

1. Check the function of coin drop 1.	If the coin drop micro contact or optocoupler is not functioning at 100%, replace the coin drop opr the optocouple.
2. Check the continuity of the wiring.	If the wiring is not continuous, repair the wiring.

DIAGNOSTIC CODE D14: DOOR LOCK CHECK AT START FAILURE

The washer will not start a new process when the door is not locked after pressing the START button. The Message DOOR is displayed. When you open the door, the fault message is erased.

Exception: If the "DOOR SWITCH" is opened again just before the cycle has started (the "DOOR SOLENOID SWITCH" is still closed). Diagnostic Code D14 will also be generated.

DIAGNOSE (ERR 8):

1. Check if the input connector A is connected.	If the input connector A is not connected, connect connector A.
2. Check for proper function of the "DOOR SOLENOID SWITCH."	If the door switch is broken or does not function at 100%, replace the defective door lock parts.
3. Check the door lock coil.	If the door lock coil does not function, replace the door lock coil.
4. Check the mechanical function of the door lock.	If the door lock is not functioning mechanically, repair the door lock system.
5. Check the continuity of the wiring.	If the wiring is not continuous, repair the wiring.
6. Check the output relay that powers the door lock coil.	If the relay is broken, replace the MCG computer.
7. Check for proper function of the "DOOR SWITCH."	If the door switch is broken or does not function at 100%, replace the door switch.
8. Check the door switch input at the MCG computer. (See Inputs at Toolbox Menu.)	If the MCG computer input is not functional, replace the MCG computer board.

DIAGNOSTIC CODE D15: OVERFILL FAILURE

If the target water level is X units above the target level, Diagnostic Code D15 will be displayed.

The fault message will not be generated when the user is advancing from a sequence with a high water level to a sequence with a low water level.

X = "Max. level Overfill," a value that can be programmed from the Initialization Menu.

DIAGNOSE (ERR 12):

1. Check if the water inlet valves are broken.	If the water inlet valves are broken, clean or replace the water inlet valve diaphragms.
2. Check if the water pressure is too high.	Lower the water pressure.
3. Check the output relay that powers the inlet valve.	If the relay stays closed and the relay is broken, replace the wash computer.

In Case of Steam Heating :

If the steam has not enough heating power (too low temperature), the washer will be filled with too much water while the water is heating. This will result in an increased water, energy, and supply consumption.

It is strongly recommended that the heating installation works with enough heating power.

A simple solution can also be to reduce the programmed target water level. As less steam will be required, the normal water level should be reached. In the Initialization Menu it is also possible to adjust the alarm level to avoid the error message "= not recommended."

DIAGNOSTIC CODE D16: COMM DEBIT CARD FAULT

If the Gen 2 Debit Card Reader is no longer communicating for 5 minutes with the wash computer, failure Diagnostic Code D16 will be displayed. The fault message will be cleared automatically when the communication is restored.

DIAGNOSE:

1. Check if the Gen 2 Debit Card Reader is connected to the wash computer.	Connect the Gen 2 Debit Card Reader to the wash computer.
2. Check that the wash computer is set up to work with a Gen 2 Debit Card Reader.	Adjust the wash computer settings so that Enhanced Debit is selected at the Pricing Menu.
3. Check the continuity of the wiring.	Repair the wiring.

DIAGNOSTIC CODE D17: BIMETAL/SPRING

The Bimetal/Spring is extra security that keeps the door from being opened immediately when the power is switched off. To verify that the Bimetal/Spring is not defective, the Bimetal/Spring is checked each cycle. If the Bimetal/Spring is defective, at the end of the program, Diagnostic Code D17 is displayed.

DIAGNOSE (ERR 10):

1. Check the Bimetal/Spring.	If the Bimetal/Spring system is defective, replace the Bimetal/Spring.
2. Check the mechanical function of the door lock.	If the door lock is not functioning mechanically, replace the door lock system.
3. Check the continuity of the wiring.	If the wiring is not continuous, repair the wiring.

DIAGNOSTIC CODE D18: MEMORY ERRORS

If a memory error occurs, the EEPROM is malfunctioning.

Try to reload the programs. Check for the source of the electrical "noise."

DIAGNOSTIC CODE D19: SOFTWARE ERRORS

Software errors should not occur. If a software error message occurs, inform Maytag.

HELP CODE H50: TOO HOT

When the water temperature is 27°F (15°C) above the target temperature, Help Code 50 will be displayed.

For evaluation of the problem, you can follow the water temperature in the drum on the display of the washer at the Status Menu. (Select Cycle-Status Menu at Main Menu.)

DIAGNOSE (ERR 15):

1. Check if correct water inlet valves are functional. If the cold water inlet valves are not functional or if the main cold water supply is not available and only hot water inlet valves are open, and if the hot water supply has a temperature value above the programmed wash sequence value, the temperature of the wash bath will be too high.	See diagnostics Failure 11: Fill Failure.
2. Check the water temperature.	If the temperature of the supplied hot water is too high, decrease the temperature of the hot water.
3. Check if the temperature sensor is functioning.	If the temperature sensor is defective, replace the temperature sensor.
4. Check the output relay that powers the hot water inlet valves.	If the relay stays closed and the relay is broken, replace the wash computer.

HELP CODE H51: OVERFLOW FAILURE

When the water level is raising above the hole of the overflow tube: Help Code H51 will be displayed.

DIAGNOSE (ERR 21):

1. Check if the overflow hole and tube is blocked.	If the overflow tube is blocked, repair the tube.
2. Check if the drain tube is blocked.	If the drain tube is blocked, repair the drain tube.
3. Check the water inlet valves.	If the water inlet valves are broken, replace the water inlet valves.
4. Check the output relay that powers the inlet valve.	If the relay remains closed and the relay is broken, replace the wash computer.

HELP CODE H52: WRONG INPUT (UNBALANCE)

Help Code H52 occurs when the input for tilt switch F- washers has been wired. For safety reasons, this input must stay low on MFR washers.

DIAGNOSE (ERR 69):

1. Input (FS tilt) must not be wired and must have low voltage.	Remove the wire or replace the wash computer.

HELP CODE H53: RS7 SELECT

Incorrect washer type has been selected. MFR18 has been selected instead of MFR25.

Select the correct washer type. (See washer type plate on the rear of the washer.)

HELP CODE H54: RS10 SELECT

Incorrect washer type has been selected. MFR25 has been selected instead of MFR18.

Select the correct washer type. (See washer type plate on the rear of the washer.)

Check if the wire bridge on mobile connector F on pins 1 and 3 is available.

HELP CODE H55: SLOW REFILL

After the fill sequence (washer has already taken the correct amount of water to wash), the washer fails to refill in case there is a leak.

For diagnostic evaluation, see D7: Slow Fill.

Help Code H55 is for informative purposes only and does not result in an Error handling procedure.

HELP CODE H56: NO INTERNAL CLOCK

Help Code H56 occurs when the Internal Clock of the wash computer is no longer functional.

This will stop the wash computer Day and Time calculation and will end automatic switching between Normal & Special Pricing.

This is probably a hardware failure of the wash computer.

HELP CODE H57: NO SIGN SPIN

MFR18–MFR25 only. Help Code H57 occurs when there is no feedback speed signal from the Motor Drive at the spin sequence. Probably this also means that the drum is not turning.

DIAGNOSE (ERR 68):

1. Check the communication cable.	If the communication cable is broken, repair the communication cable.
2. Check the motor drive.	If the motor drive is broken, replace the motor drive.
3. Check the motor.	If the motor is broken, replace the motor.
4. Check the power cable to the motor drive and also to the motor.	If the power cable is broken, repair the power cable.
5. Check the output relay that powers the motor drive.	If the relay is broken, replace the wash computer.
6. Check the contactor power supply motor drive. (Contactor is not available on all washer types.)	If the contactor is broken, replace the contactor.

HELP CODE H58: LOCK ACTIVE

Help Code H58 occurs when at standby the door lock is locked even though the door is open.

Before further use of the washer, door lock must first be unlocked by technical intervention.

DIAGNOSE (ERR 78):

1. Check for correct function of door lock system.	If door lock system is broken, repair door lock system.

HELP CODE H59: LOCK START

Help Code H59 occurs when at standby the door lock is locked even though the door is open.

Before further use of the washer, door lock must first be unlocked by technical intervention.

DIAGNOSE (ERR 79):

1. Check correct functioning of door lock system.	If door lock system is broken, repair door lock system.

HELP CODE H60: UNDEFINED FREQUENCY INVERTER ERROR CODE

This fault should not occur. Inform Maytag.

HELP CODE H61: THT TIME OUT

Help Code H61 occurs when the software cannot handle the THT fault of the Frequency Inverter. This fault is a specific fault of the Frequency Inverter caused by an overcurrent.

DIAGNOSE (ERR 28):

1. Check if the correct washer type is selected at the Configuration Menu.	If the incorrect washer type is selected, enter the correct washer type.
2. Check if the correct Inverter parameters have been implemented.	Load the correct Inverter parameters.
3. Check if the fault continues.	If the fault continues, contact Maytag.

HELP CODE H62: OV3 TIME OUT

Help Code H62 occurs when the software cannot handle the OV3 fault of the Frequency Inverter. This fault is a specific fault of the Frequency Inverter caused by an overvoltage during deceleration.

DIAGNOSE (ERR 29):

1. Check if the correct washer type is selected at the Configuration Menu.	If the incorrect washer type is selected, enter the correct washer type.
2. Check if the correct Inverter parameters have been implemented.	Load the correct Inverter parameters.
3. Check if there was a high unbalance during extraction, which can be caused by putting only half loads in the washer.	Always put a full load in the washer drum. Do not put material other than textile linen (fabrics) in the washer.
4. Check if the fault continues.	If the fault continues, contact Maytag.

HELP CODE H63: INITIALIZATION FAULT INVERTER

If a fault occurs while the parameter set of the Frequency Inverter is written to the EEPROM memory of the Inverter, Help Code H63 will be displayed.

NOTE: It is not recommended to use the washer as the Inverter will function with the incorrect parameter settings.

DIAGNOSE (ERR 31):

1. Check if the door is closed and locked.	If the door is not closed, close the door. If the door is not locked, repair the door lock system.
2. Check if the Inverter is energized.	If the Inverter is not energized, check the power to the Inverter (see Diagnostic Code D11/Err 27).
3. Write the parameters once more into the Inverter.	If the fault continues, contact Maytag.

HELP CODE H64: VERIFICATION FAULT INVERTER

The software of the electronic timer will check if the parameter settings are correctly loaded. If not:
Help Code H64 will be displayed. Help Code H64 cannot be reset by the ENTER button.
The fault message can be erased by switching the power off/on.
The fault message can be erased by loading the correct parameter set.

DIAGNOSE (ERR 32):

1. Check if the correct washer type is selected in the Configuration Menu.	If the incorrect washer type is selected, enter the correct washer type.
2. Check if the door is closed and locked.	If the door is not closed, close the door. If the door is not locked, repair the door lock system.
3. Check if the Inverter is energized.	If the Inverter is not energized, check the power to the Inverter (see Diagnostic Code D11).
4. Write the parameters once more into the Inverter.	If the fault continues, contact Maytag.

HELP CODE H65: STALL AVOIDANCE FUNCTION

This fault number indicates that the stall avoidance of the Frequency Inverter is functioning intermittently. The fault number is not displayed at the end of the program cycle. The number is only written to the error log register. The stall avoidance function will only be activated to avoid overcurrent in the motor.

This fault number is an indication that there is too much laundry in the drum. The fault may also be caused by an unbalanced laundry load, resulting in extra work load for the motor.

DIAGNOSE (ERR 33):

1. Check if the drum is not overloaded.	Use the correct amount of laundry in the drum.
2. Check if the correct washer type has been selected in the Config Menu.	The installed parameters are related to the motor and washer type size. If an incorrect washer type was selected, the stall avoidance will function for the incorrect motor type. Select the correct washer type.
3. Check if the correct Inverter parameters have been implemented.	Load the correct Inverter parameters.
4. Check if there are mechanical parts broken.	Broken parts can cause an unbalance of the drum. Replace the broken parts.

HELP CODE H66: INCORRECT VOLTAGE RANGE SELECTION

Help Code H66 occurs when the incorrect voltage range has been selected in the Configuration Menu.

Depending on the washer type and the Inverter type, certain voltage ranges are not allowed.

DIAGNOSE (ERR 43):

1. Check the Washer Identification plate at the back of the washer.	Select the same voltage range in the Configuration Menu as on the Identification plate of your washer. Menu Item: Supply Voltage

HELP CODE H67: INCORRECT INVERTER MODEL TYPE

Help Code H67 occurs when the incorrect Inverter Model Type has been detected by the MCG AC software. Before loading the parameters from the Wash Computer to the Mitsubishi Inverter, the Inverter type is checked first.

DIAGNOSE (ERR 44):

1. Check if you have selected the correct washer type.	Select the correct washer type in the Configuration Menu. Menu Item: Washer Type
2. Check the Washer Identification plate at the back of the washer.	Select the same voltage range in the Configuration Menu as on the Identification plate of your washer. Menu Item: Supply Voltage

HELP CODES H71, H74, H75, H76, H88: CARD READER MESSAGES

These Help Codes occur if communication between the Card Reader and MCG AC Wash Computer is interrupted.

These Help Codes are for informative purposes only and do not need technical intervention unless the problem continues.

ERROR CODE E35: INCORRECT SOFTWARE VERSION

When a totally new software that is not downward compatible with previous software versions is loaded, the software will detect that the old and new software are not compatible.

You have to reconfigure the MCG Wash Computer. See "Configuration" on page 9.

ATTENTION: ALL THE CUSTOM SETTINGS WILL BE ERASED IN THE MCG WASH COMPUTER BY LOADING THE FACTORY SETTINGS.

After reinitialization of the MCG Wash Computer, Error Code 35 can only be erased by switching the power Off/On.

HELP CODE E95: WATCH DOG

If the watch dog has been activated, Help Code H53 is logged in the Error log register. If this occurs often, request assistance from a technician.

DIAGNOSTIC CODE D12
ERROR CODES 300-353: MITSUBISHI INVERTER ALARM MESSAGE

If a Mitsubishi Inverter Alarm occurs, check "Troubleshooting" in the Mitsubishi Inverter manual.

300 Err OC1	308 Err FAN	316 Err RET	324 Err OP2
332 Err MB5	340 Err E.3	348 USB	
301 Err OC2	309 Err OLT	317 Err CPU	325 Err OP3
333 Err MB6	341 Err ILF	349 OS	
302 Err OC3	310 Err BE	318 Err E.6	326 Err CTE
334 Err MB7	342 Err PTC	350 OD	
303 Err OV1	311 Err GF	319 Err E.7	327 Err P24
335 Err FIN	343 Err PE2	351 EP	
304 Err OV2	312 Err OHT	320 Err IPF	328 Err MB1
336 Err OSD	344 Err CDO	352 E.11	
305 Err OV3	313 Err OPT	321 Err UVT	329 Err MB2
337 Err ECT	345 Err IOH	353 E.13	
306 Err THT	314 Err PE	322 Err LF	330 Err MB3
338 Err E.1	346 Err SER		
307 Err THM	315 Err PUE	323 Err OP1	331 Err MB4
339 Err E.2	347 Err AIE		

DIAGNOSE FOR FAILURE 303-304-305 (OV-ERRORS):

1. Check if the correct washer type is selected in the S-submenu.	If the incorrect washer type is selected, enter the correct washer type.
2. Check if there was a large unbalance during extraction, which can be caused by putting only half loads in the washer.	Always put a full load in the washer drum. Do not put material other than textile linen (fabrics) in the washer.
3. Check if the fault continues.	If the fault continues, contact Maytag.

DIAGNOSTIC CODE D18
ERROR CODES 500–518: MEMORY ERRORS

If a memory error occurs, there is a problem with the EEPROM.

Try to reload the programs. Check for the source of the electrical "noise."

DIAGNOSTIC CODE D19
ERROR CODES 600–630: SOFTWARE ERRORS

Software errors must not occur. If a software error message occurs, inform Maytag.

SERVICE INFORMATION

⚠ WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

IMPORTANT:

- Disconnect the washer from the source of power and wait until the washer cools down or drains water before servicing or repairing the washer.
- Follow all instructions in this manual and the labels as well as basic safety precautions to avoid burns, scalds, and electric shock.

Maintenance

IMPORTANT: Disconnect from the power supply before proceeding.

- Use a slighty damp cloth to remove any dirt from the keyboard.

NOTE: Do not use strong soaps, caustic chemicals, gasoline, or other organic solvents. These materials could damage the keyboard.

INFORMATION FOR SERVICE:

Every circuit board has a sticker placed on the EEPROM that specifies the version and the software version date. This information, along with the washer serial number (including order code), must be provided in all correspondence or inquires to Maytag.

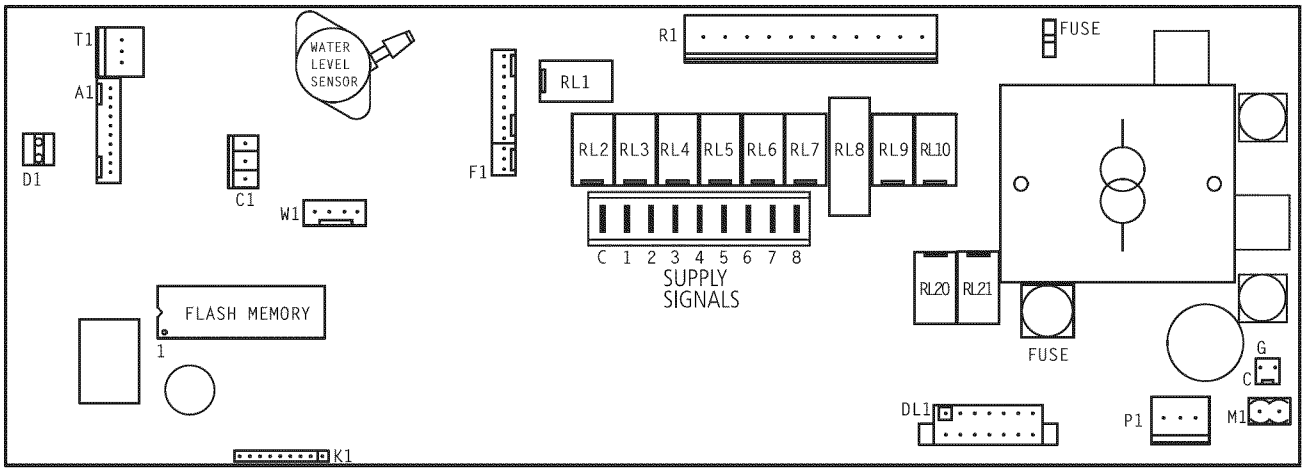
XXX-VVV

XXX = 641 (Software for the MCG washer computer [MC4])

XXX = 742 (Software for the MCG washer computer [MC5])

VVV = Version

PROGRAMMER CIRCUIT BOARD



Voltage:	200–240 Vac, 50/60 Hz
Power:	max 16 VA
Memory:	Flash Memory (contains the software) EEPROM (contains the customized programs)
Output:	11 relays
Serial interface:	RS485 (2 wire) networking between wash computer and external device (PC Computer)
Display:	LCD display

Replacing the Electronic Board and Keypad

⚠ WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Switch off the main power supply. Open the top cover of the washer.
2. Remove the connectors from the circuit board and remove the hose from the level sensor. Remove the combination of the metal support plate/electronic timer from the rear side of the fascia panel.
3. Remove the two nuts of the metal support plate and gently pull the assembly from the rear side. Install the new combination support plate/electronic timer in the washer and tighten the two nuts.

   NOTE: Do not damage the flex cable attaching the keypad.
4. Reconnect all the connectors and put the hose back on the level sensor.

   NOTE: Make certain the level sensor hose is attached with a hose clamp. The hose must be airtight to operate correctly.
5. Close the top cover of the washer.
6. Switch on the power supply. The display should illuminate.

IMPORTANT: Only a qualified technician should perform configuration setup. Incorrect configuration setting could cause serious washer damage.

Installing New Software

⚠ WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Switch off the main power supply. Open the top cover of the washer.
2. Take the combination support plate/electronic timer out of the washer. Remove the EEPROM from the IC holder and replace it with a new one. Make certain the chip is in the correct position.

   NOTE: The Flash Memory with the implemented software is the only IC on the logic board that can be removed.
3. Reinstall the combination support plate/electronic timer in the washer. Reconnect all the connectors and put the hose back on the level sensor.

   NOTE: Make certain the level sensor hose is attached with a hose clamp. The hose must be airtight to operate correctly.
4. Close the top cover of the washer.
5. Switch on the power supply. The display should illuminate. If the software is compatible with the previous software, re-initialization will not be necessary.
6. If the software is not compatible with the previous version, Fault Message 35 will occur. When Fault Message 35 occurs, the settings in the Configuration and Initialization Menu must be reset.
   - Select Reset Factory Settings in the Configuration Menu (see "Configuration" in "Washer Startup").
   - Go through the menu items in the Configuration Menu and make certain the settings correspond with your preferred settings.

   NOTE: All custom settings will be lost.
   - Switch the power off for 5 seconds and on again. Once the reset is correctly performed, Err 35 will no longer be displayed. The washer is now reset.

WASHER SPECIFICATIONS

❑ MACHINE DATA

- Type: _____
- Phases: _____
- Serial Number: _____
- Frequency: _____
- Voltage: _____
- Output: _____
- Water Supply: ❑ Cold Soft ❑ Cold Hard ❑ Hot Soft

❑ ELECTRONIC DATA

Programmer Type: _____

- Serial Number: _____
- Software Version: _____
- Software Date: _____
- Keyboard: _____

❑ MACHINE CONFIGURATION DATA

FUNCTION **DATA ENTERED**

- MACHINE TYPE: _____
- BRIGHTNESS DISPLAY: _____
- TEMPERATURE: ❑ Celsius ❑ Fahrenheit

❑ MACHINE INITIALIZATION DATA

FUNCTION **DATA ENTERED**

- LANGUAGE: _____
- COMPART. FLUSH PRE-WASH: ❑ Yes ❑ No
- WATER HEATER TEMPERATURE: _____ °F
- MAX. WATERFILL TIME: ____ Minutes
- OVERFILL DETECTION: _____ Units

APPENDIX

Table A-1: Programmable Water Level Units Related to the Amount of Water (l = liters) in the Tub

Programmed water LEVEL (Water level height in units)	Machine Size	MFR 18	MFR 25	MFR 30	MFR 40	MFR 50	MFR 60	MFR 80	MFS 18	MFS 25	MFS 35
	units										
	18								12 l	13 l	
	19	① 13 l	14 l	19 l					① 13 l	14 l	
	20	14 l	① 16 l	21 l					14 l	① 15 l	19 l
	21	15 l	19 l	23 l					15 l	17 l	22 l
	22	16 l	② 22 l	① 25 l					17 l	② 20 l	25 l
	23	② 18 l	25 l	28 l					② 18 l	23 l	① 28 l
	24	20 l	28 l	② 31 l	① 31 l	①② 47 l		61 l	20 l	25 l	31 l
	25	22 l	31 l	34 l	35 l	52 l		① 67 l	22 l	28 l	② 34 l
	26	24 l	34 l	37 l	② 38 l	57 l	① 55 l	73 l	24 l	31 l	37 l
	27	26 l	36 l	40 l	41 l	62 l	② 60 l	② 78 l	26 l	33 l	40 l
	28	29 l	38 l	43 l	44 l	67 l	65 l	83 l	28 l	36 l	43 l
	29	32 l	41 l	46 l	48 l	72 l	70 l	89 l	31 l	38 l	46 l
	30	34 l	43 l	49 l	52 l	77 l	76 l	95 l	33 l	40 l	49 l
	31	36 l	45 l	52 l	56 l	83 l	81 l	101 l	35 l	43 l	53 l
	32	38 l	48 l	55 l	60 l	89 l	86 l	107 l	37 l	46 l	57 l
	33	40 l	51 l	58 l	63 l	95 l	91 l	113 l	39 l	48 l	60 l
	34	42 l	54 l	60 l	67 l	101 l	96 l	119 l	41 l	50 l	63 l
	35	45 l	57 l	63 l	71 l	107 l	101 l	125 l	44 l	53 l	67 l
	36	47 l	59 l	66 l	75 l	113 l	106 l	131 l	46 l	55 l	70 l
	37	49 l	61 l	69 l	79 l	119 l	111 l	137 l	48 l	58 l	74 l
	38	51 l	64 l	72 l	83 l	125 l	116 l	144 l	51 l	61 l	78 l
	39	53 l	66 l	76 l	87 l	131 l	121 l	150 l	53 l	63 l	81 l
	40	55 l	68 l	79 l	91 l	137 l	127 l	157 l	55 l	65 l	84 l
	41			83 l	96 l	143 l	132 l	164 l			88 l
	42			86 l	100 l	149 l	137 l	170 l			91 l
	43			89 l	104 l	155 l	142 l	177 l			95 l
	44			92 l	108 l	161 l	148 l	184 l			99 l
	45			95 l	113 l	167 l	153 l	192 l			103 l
	46				117 l	173 l	159 l	198 l			107 l
	47				121 l	179 l	164 l	204 l			111 l
	48				125 l	185 l	170 l	210 l			114 l
	49				129 l	191 l	175 l	216 l			118 l
	50				133 l	197 l	181 l	223 l			122 l
	51						187 l				124 l
	52						192 l				127 l
	53						198 l				
	54						203 l				
	55						208 l				
	56						214 l				
	57						220 l				
	58						225 l				
	59						231 l				
	60						236 l				

Table A-2: Default Programmable Water Level (Units)

Machine size	Minimum programmable level	Normal Low Level Default value	Normal High Level Default value	Maximum programmable level
MFR 18	19	19	23	40
MFR 25	19	20	22	40
MFR 30	19	22	24	45
MFR 40	24	24	26	50
MFR 50	24	24	24	55
MFR 60	26	26	27	60
MFR 80	24	25	27	50
MFS18	18	19	23	40
MFS25	18	20	22	40
MFS35	20	23	25	52

Table A-3: Default Programmable Drum Speed at Wash and Spin

	Wash Speed	Spin Speed			Low Spin Speed
Machine size	**default RPM**	**default RPM**	min RPM	max RPM	default RPM
MFR18	048	**570**	95	580	290
MFR25	048	**570**	95	580	290
MFR30	045	**515**	85	525	265
MFR40	044	**495**	85	505	260
MFR50	044	**470**	85	480	260
MFR60	042	**480**	75	490	250
MFR80	038	**500**	75	510	260
MFS18	050	**980**	95	999	550
MFS25	050	**980**	95	999	550
MFS35	045	**950**	85	980	550

Installation Record

Machine Type:

Program Version:
Full Control Timer (FC)

Installation Date:

Installation Performed by:

Serial Number:

Electrical Details:

_____ **Volt** _____ **Phase** _____ **HZ**

NOTE:
Any correspondance with your dealer regarding machine maintenance, repair, or spare parts must include the above Installation information.
Keep this manual in a secure place for future reference.

Dealer:

8/12
Printed in the Czech Republic