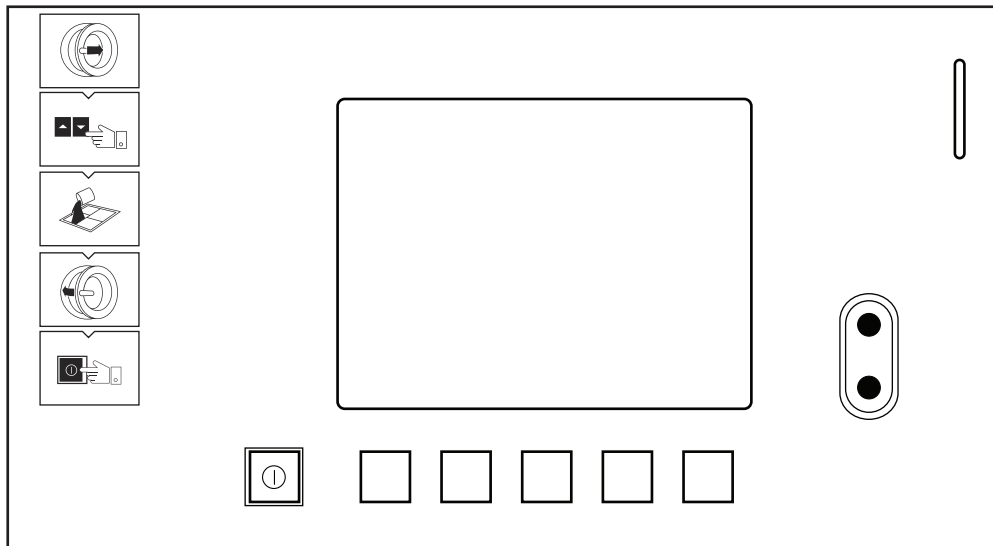


# Washer-Extractor

Cygnus Professional

Refer to Page 3 for Model Numbers




CFD198R

**Keep These Instructions for Future Reference.**

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



	<b>WARNING</b>
<p>Failure to install, maintain, and/or operate this machine according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.</p>	
<p>W030</p>	

**NOTE:** The **WARNING** and **IMPORTANT** instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution, and carefulness are factors which cannot be built into these washer-extractors. These factors **MUST BE** supplied by the person(s) installing, maintaining, or operating the washer-extractor.

Always contact the distributor, service agent, or the manufacturer about any problems or conditions you do not understand.

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# Model Identification

Information in this manual is applicable to these washer-extractor models:

CHF455	CHW065Z	CXN165Z
CHF575	CHW075Z	CXN235Z
CHF730	CHW100Z	CXN305Z
CHG065Z	CHW135Z	CXU060Z
CHG075Z	CHW150Z	CXU065Z
CHG100Z	CHW165Z	CXU075Z
CHG135Z	CHW185Z	CXU100Z
CHG150Z	CHW235Z	CXU135Z
CHG165Z	CHW305Z	CXU165Z
CHG185Z	CHW400Z	CXU235Z
CHG235Z	CHZ065Z	CXU305Z
CHG305Z	CHZ075Z	CXW060Z
CHG400Z	CHZ100Z	CXW065Z
CHN065Z	CHZ135Z	CXW075Z
CHN075Z	CHZ150Z	CXW100Z
CHN100Z	CHZ165Z	CXW135Z
CHN135Z	CHZ185Z	CXW165Z
CHN150Z	CHZ235Z	CXW235Z
CHN165Z	CHZ305Z	CXW305Z
CHN185Z	CHZ400Z	CXZ060Z
CHN235Z	CXG060Z	CXZ065Z
CHN305Z	CXG065Z	CXZ075Z
CHN400Z	CXG075Z	CXZ100Z
CHU065Z	CXG100Z	CXZ135Z
CHU075Z	CXG135Z	CXZ165Z
CHU100Z	CXG165Z	CXZ235Z
CHU135Z	CXG235Z	CXZ305Z
CHU150Z	CXG305Z	HD100_CYGNUS-PRO
CHU165Z	CXN060Z	HD135_CYGNUS-PRO
CHU185Z	CXN065Z	HD165_CYGNUS-PRO
CHU235Z	CXN075Z	HD235_CYGNUS-PRO
CHU305Z	CXN100Z	HD305_CYGNUS-PRO
CHU400Z	CXN135Z	HD60_CYGNUS-PRO

(Continued)

## Model Identification

(Continued)

HD65_CYGNUS-PRO	IHU185Z	XN100Z
HD75_CYGNUS-PRO	IHU235Z	IXN135Z
HF455_CYGNUS-PRO_OPL	IHU305Z	IXN165Z
HF575_CYGNUS-PRO_OPL	IHU400Z	IXN235Z
HF730_CYGNUS-PRO_OPL	IHW065Z	IXN305Z
HF900_CYGNUS-PRO_OPL	IHW075Z	IXU060Z
IHF455	IHW100Z	IXU065Z
IHF575	IHW135Z	IXU075Z
IHF730	IHW150Z	IXU100Z
IHG065Z	IHW165Z	IXU135Z
IHG075Z	IHW185Z	IXU165Z
IHG100Z	IHW235Z	IXU235Z
IHG135Z	IHW305Z	IXU305Z
IHG150Z	IHW400Z	IXW060Z
IHG165Z	IHZ065Z	IXW065Z
IHG185Z	IHZ075Z	IXW075Z
IHG235Z	IHZ100Z	IXW100Z
IHG305Z	IHZ135Z	IXW135Z
IHG400Z	IHZ150Z	IXW165Z
IHN065Z	IHZ165Z	IXW235Z
IHN075Z	IHZ185Z	IXW305Z
IHN100Z	IHZ235Z	IXZ060Z
IHN135Z	IHZ305Z	IXZ065Z
IHN150Z	IHZ400Z	IXZ075Z
IHN165Z	IXG060Z	IXZ100Z
IHN185Z	IXG065Z	IXZ135Z
IHN235Z	IXG075Z	IXZ165Z
IHN305Z	IXG100Z	IXZ235Z
IHN400Z	IXG135Z	IXZ305Z
IHU065Z	IXG165Z	JHW065Z
IHU075Z	IXG235Z	JHW075Z
IHU100Z	IXG305Z	JHW100Z
IHU135Z	IXN060Z	JHW135Z
IHU150Z	IXN065Z	JHW150Z
IHU165Z	IXN075Z	JHW165Z

(Continued)

(Continued)

JHW185Z	JXW100Z	WD150_CYGNUS-PRO
JHW235Z	JXW135Z	WD165_CYGNUS-PRO
JHW305Z	JXW165Z	WD185_CYGNUS-PRO
JHW400Z	JXW235Z	WD235_CYGNUS-PRO
JXW060Z	JXW305Z	WD400_CYGNUS-PRO
JXW065Z	WD100_CYGNUS-PRO	WD65_CYGNUS-PRO
JXW075Z	WD135_CYGNUS-PRO	WD75_CYGNUS-PRO

# Preliminary Information

## About the Control

This control is an advanced, programmable computer that lets the operator control machine features by pressing a sequence of keypads. Refer to *Figure 1*.

The control allows the operator to obtain information from the machine, run test cycles, modify the control's programmable features, set the service counters and view the error code history. Refer to *The Non-Active Menu* section for a list of features.

**IMPORTANT: In the event of a power failure, the control will not have to be reprogrammed. It is designed with a memory system that will remember how it was programmed until the electrical power is restored.**

**IMPORTANT: It is extremely important that the washer-extractor has a good ground connection and that all mechanical and electrical connections to the control are made before applying power to or operating the washer-extractor.**

## Glossary of Terms

The following are a few terms and abbreviations to learn. These are referred to throughout the instructions.

Display – This term refers to the window area of the control that displays words and values.

## Power Failure Recovery

If a cycle is in progress and the power fails, the water will be drained from the machine and the door can be opened after approximately 3 minutes. If the door is not opened and the power failure is shorter than 2 weeks, the washer-extractor will resume the previously active cycle.

If the door is opened or if the length of the power failure is longer than 2 weeks, the control will end the cycle and the display will revert back to Start Mode.

## Communications

The control may be programmed manually or by infra-red communication with an external device.

### *Infra-red Communications*

A PC allows the owner to program and retrieve information from the control without using the machine's keypad, which greatly expands the programming options available to the owner. However, it is not required to program and operate the washer-extractor. The operation of a PC and the advanced features available are covered separately in the instructions included with the PC programming software, Cygnus Assist.



# Control Identification

## Selection Keypads

(Refer to *Figure 1*)

The Selection keypads are used in various combinations to obtain information from the machine, run wash cycles, run test cycles, modify the control's programmable features, set the service counters and view the error code history. These instructions cover the manual programming and data retrieval options.

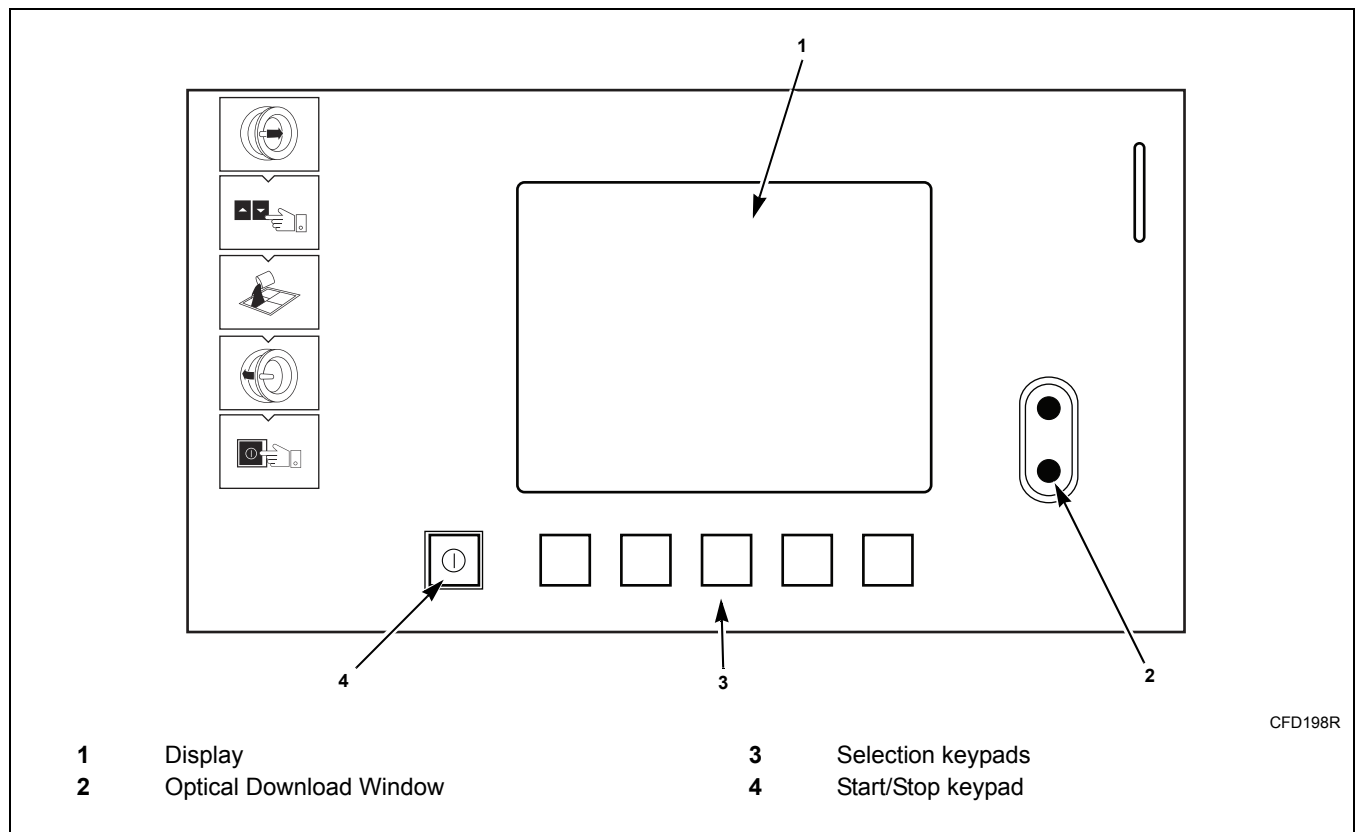


Figure 1

# Display Identification

## Cycle Screen

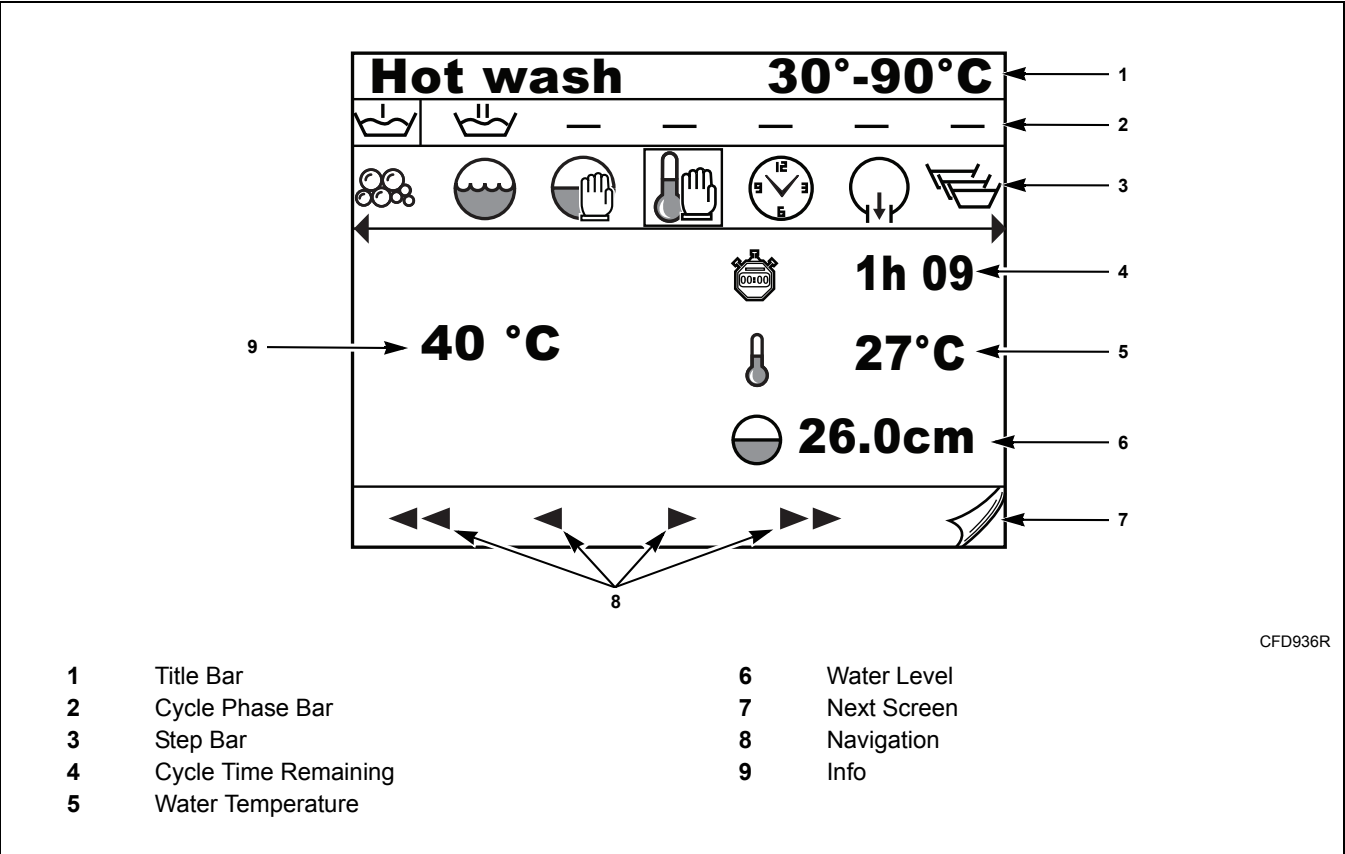


Figure 2

### Title Bar (Refer to *Figure 2, Item 1*)

Displays the cycle.

### Cycle Phase Bar (Refer to *Figure 2, Item 2*)

Displays how the various phases of the cycle are progressing. The active phase is highlighted.

	CFD203R CFD202R CFD201R	Wash Cycle
	CFD204R	
	CFD205R	

Table 1

### Step Bar (Refer to *Figure 2, Item 3*)

Displays the phase components. The active component appears in the selection box.



















Symbol	Description
 CFD206R	Wash Phase
 CFD207R	Wash Action
 CFD208R	Heating
 CFD209R	Controlled Heating
 CFD210R	Drain
 CFD211R	Label
 CFD213R	Water Inlet
 CFD214R	Water Level Time Stop
 CFD215R	Heating Time Stop
 CFD216R	Time
 CFD217R	Spin
 CFD218R	Subroutine
 CFD219R	Water Level
 CFD220R	Soap Inlet
 CFD221R	Cool Down
 CFD222R	Hold
 CFD224R	Relay Contact
 CFD224R	Predefined Start

Table 2

### Cycle Time Remaining (Refer to *Figure 2, Item 4*)

Displays the remaining program time.



Figure 3

### Water Temperature (Refer to *Figure 2, Item 5*)

Displays the temperature of the water. This symbol is flashing when heating is activated.

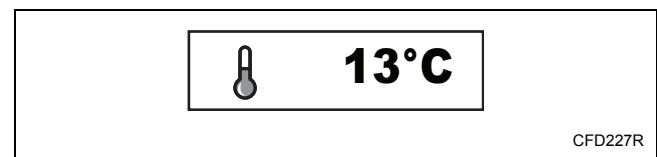


Figure 4

### Water Level (Refer to *Figure 2, Item 6*)

Displays the water level in the wash tub. This symbol is flashing when machine is filling.

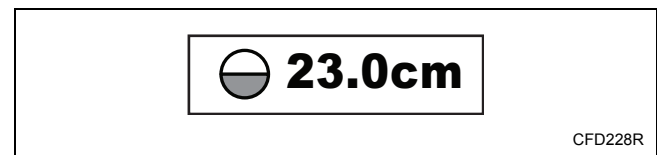


Figure 5

### Next Screen (Refer to *Figure 2, Item 7*)

View the next screen.

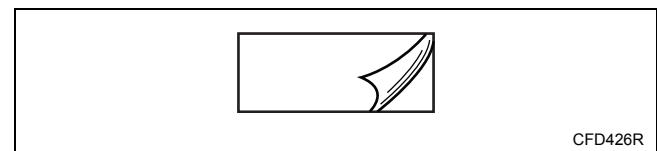


Figure 6

### Proceed - Return (Refer to *Figure 2, Item 8*)





	CFD261R	Go to the next component.
	CFD423R	Restart the current phase.
	CFD424R	Start the next phase.
	CFD425R	Resume the previous or first phase.

Table 3

## Display Identification

### Info (Refer to *Figure 2, Item 9*)

Displays information on the active component:










Symbol	Description
<div>15 cm</div> <div>CFD229R</div> <div></div> <div>CFD214R</div>	<b>Level Stop:</b> Target level is displayed.
<div>40 °C</div> <div>CFD230R</div> <div></div> <div>CFD215R</div>	<b>Heat Stop:</b> Target temperature.
<div>12min25</div> <div>CFD231R</div> <div></div> <div>CFD216R</div>	<b>Time:</b> Time remaining.
<div>1</div> <div>CFD232R</div> <div></div> <div>CFD210R</div>	<b>Drain:</b> Selected drain.
<div>500 rpm</div> <div>CFD233R</div> <div></div> <div>CFD217R</div>	<b>Spin:</b> Set spin speed and remaining spin time.
<div>40 °C</div> <div>CFD234R</div> <div></div> <div>CFD221R</div>	<b>Cool-down:</b> Target temperature and drop in temperature per minute.
<div>40 °C</div> <div>CFD235R</div> <div></div> <div>CFD209R</div>	<b>Controlled Heating:</b> Target temperature and rise in temperature per minute.
<div>1h59</div> <div>CFD236R</div> <div></div> <div>CFD222R</div>	<b>Waiting:</b> Remaining waiting time and self-composed comment.
<div>8:00</div> <div>CFD237R</div> <div></div> <div>CFD224R</div>	<b>Predefined Start:</b> Time at which the program will start or resume.

Table 4

# Special Features

## Programming Control

The control allows the washer-extractor's operator to program the control with the use of the keypad.

For details on programming select cycle options, refer to the *Advanced Functions Sub-menu* section.

## Viewing Control Information

The control will store information in its memory that can be retrieved by pressing various combinations of keypads. The control will record machine cycles and hours of operation.

For more information, refer to the *Logbook Sub-menu* section.

## Testing Machine Components

By entering the Non-Active Menu's Test Menu under the Advanced Functions Sub-menu, the operator may perform the following tests:

- Water Level Test
- Water Inlet Test
- Motor Test
- Temperature Sensor Test and Calibration
- Water Outlet Valve or Drain Pump Test
- Expansion Relay Test
- Rotation Sensor Door Lock and Out-Of-Balance Switch Test

For detailed information, refer to the *Test Menu* section under the Advanced Functions Sub-menu.

## Rapid Advance Feature

This feature allows the operator to manually advance through an active cycle. This feature is useful when tests must be performed immediately on a washer-extractor currently in an active cycle.

For detailed information on using the Rapid Advance feature, refer to the *Rapid Advance Feature* section.

## Communication Mode

This feature allows the control to communicate with a PC equipped with the Cygnus Assist software using infra-red communication. This allows the control to be programmed and have its data read without using the machine's keypad.

For more detailed information on using the Communication Mode feature, refer to the *Communication Mode* section.

# Washer-Extractor Operation

## Start Up

When power is applied to the washer-extractor, if the control was not powered down during a running cycle, it will enter Start Mode.

## Start Mode

The control enters this mode when the machine is ready for operation. The display will show the available cycles.

After pressing the Start/Stop keypad with the door closed and locked, the cycle will begin.

## Run Mode

Upon the start of a cycle, the control displays detailed information about the cycle and current phase.

## Stop Mode

The control enters this mode if the operator ends the cycle before it is completed by pressing the Start/Stop keypad. Once the control does not detect water or cylinder rotation, it will enter End of Cycle mode.

## End of Cycle Mode

When a cycle is complete, the control will display “End” until the door is opened. When the door is opened, the control will return to Start Mode.

# The Non-Active Menu

## What is Available in the Non-Active Menu?

The Non-Active menu can be used to obtain information from the machine, run test cycles, modify the control's programmable features, set the service counters and view the error code history.

**NOTE: To enter the Non-Active Menu, a cycle must not be in process.**

To enter the Non-Active Menu, press and hold the keypad below the Menu icon.

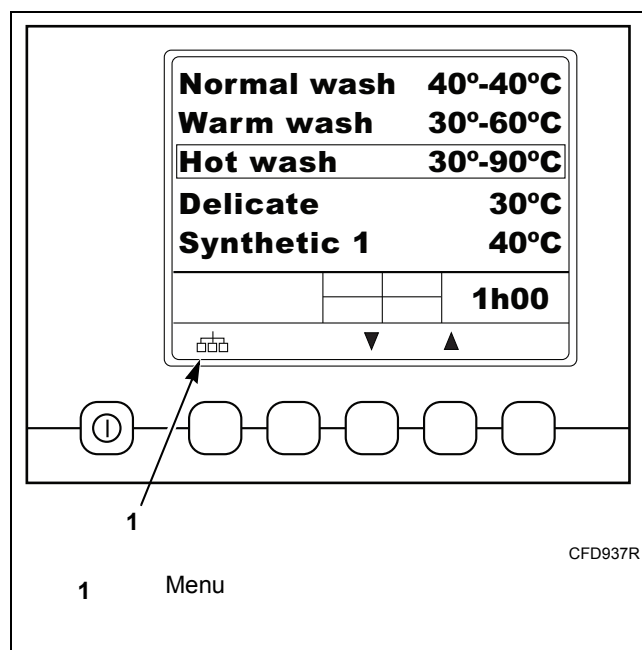


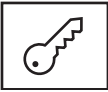

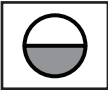


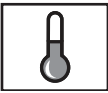
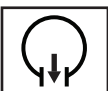








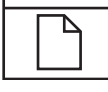


Figure 7

## Non-Active Menu Navigation

Option Number	Option Icon	Description
1	 CFD272R	<b>Logbook Sub-Menu:</b> displays information about cycles that have been run.
2	 CFD275R	<b>Info Sub-Menu:</b> displays technical information about the machine, configurations and cycle programs.
3	 CDF284R	<b>Advanced Functions Sub-Menu:</b> run test program, create or edit cycle programs.
a.	 CFD293R	<b>Test Menu:</b> test operation of certain electrical components
i.	 CFD296R	<b>Water Level Sensor:</b> set 0 level and calibrate
ii.	 CFD300R	<b>Water Inlet Valves:</b> activate valves
iii.	 CFD308R	<b>Motor:</b> test motor and frequency inverter
iv.	 CFD319R	<b>Temperature Sensor:</b> test sensor
v.	 CFD323R	<b>Water Outlet Valve or Pump:</b> test operation and seal of valves or pump

(Continued Table 5)




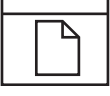



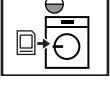
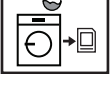
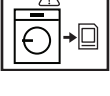
(Continued Table 5)

Option Number	Option Icon	Description
vi.	 CFD327R	<b>Expansion Relay:</b> activate the (optional) expansion relay
vii.	 CFD329R	<b>Inputs:</b> test inputs
b.	 CFD333R	<b>Edit Menu:</b> create, edit, copy or delete cycle programs
i.	 CFD335R	<b>Edit Program</b>
ii.	 CFD336R	<b>Copy Program</b>
iii.	 CFD337R	<b>Delete Program</b>
iv.	 CFD338R	<b>Create Program</b>
v.	 CFD339R	<b>Modify Program Title</b>
c.	 CFD376R	<b>Edit Menu Subroutine:</b> create, edit, copy or delete subroutines

(Continued Table 5)

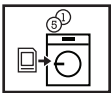
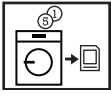


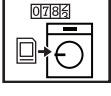
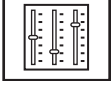

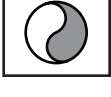




(Continued Table 5)

Option Number	Option Icon	Description
i.	 CFD385R	<b>Edit Subroutine</b>
ii.	 CFD386R	<b>Copy Subroutine</b>
iii.	 CFD387R	<b>Delete Subroutine</b>
iv.	 CFD338R	<b>Create Subroutine</b>
v.	 CFD339R	<b>Modify Subroutine Title</b>
d.	 CFD379R	<b>Data Transfer Menu:</b> upload software or download data from the machine using a data card
i.	 CFD385R	<b>Content of Data Card:</b> read content of data card
ii.	 CFD392R	<b>Upload Wash Data to Machine:</b> load cycle programs to machine
iii.	 CFD395R	<b>Download Wash Data from Machine:</b> write cycle programs to data card
iv.	 CFD397R	<b>Download Logbook from Machine:</b> write logbook contents to data card

(Continued Table 5)

(Continued Table 5)

Option Number	Option Icon	Description
v.	 CFD398R	<b>Upload Price and Time File to Machine:</b> load price and time file
vi.	 CFD401R	<b>Download Price and Time File from Machine:</b> write price and time files to data card
vii.	 CFD402R	<b>Upload Help File to Machine:</b> load help file to machine
viii.	 CFD403R	<b>Download Help File from Machine:</b> write help file to data card
ix.	 CFD404R	<b>Upload Firmware (*.csp) to Machine:</b> load firmware and updates to machine
e.	 CFD405R	<b>Setting Menu:</b> edit user settings
i.	 CFD408R	<b>Date and Time</b>
ii.	 CFD410R	<b>Display:</b> contrast
iii.	 CFD284R	<b>Password/Access Code:</b> change access code
iv.	 CFD413R	<b>Address:</b> set network address number

(Continued Table 5)

## The Non-Active Menu

(Continued Table 5)



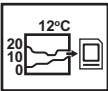

Option Number	Option Icon	Description
v.	 CFD415R	<b>Maintenance Counters:</b> set maintenance warning times
vi.	 CFD419R	<b>Advance:</b> activate/ deactivate rapid advance
vii.	 CFD420R	<b>History Overview (graph):</b> write to a data card
viii.	 CFD421R	<b>Put Out of Order:</b> disable machine

Table 5

## Non-Active Menu Options

### 1. Logbook Sub-Menu

The Logbook Sub-Menu allows the operator to view information about cycles that have been run.

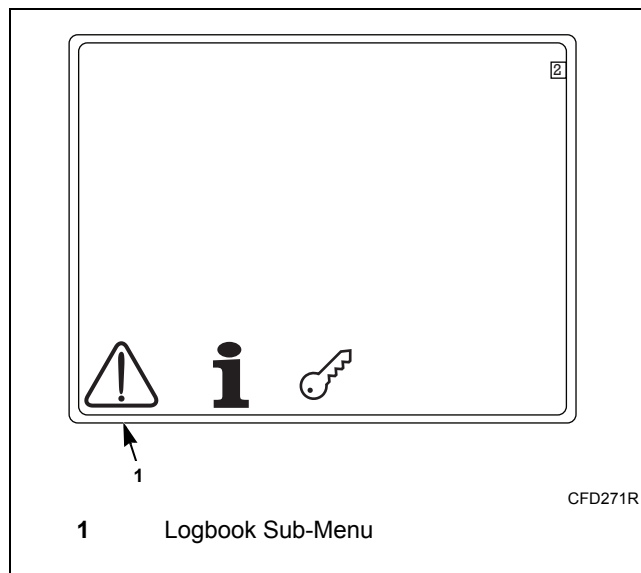


Figure 8

To access the Logbook Sub-Menu, press the keypad below the Logbook Sub-Menu icon. Refer to *Figure 8*.

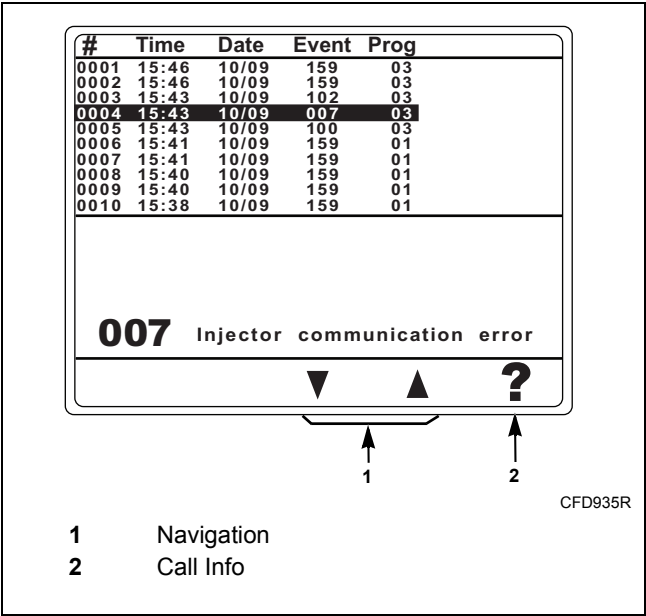


Figure 9

The overview shows the history of a cycle program.

# Number of the event

Time: Time of the event

Date: Date of the event

Event: Indication of the specific event (see page 53)

Prog: Program number

Select an action using the keypads below the Navigation icons and press keypad below the Call Info icon. Action details will be displayed.

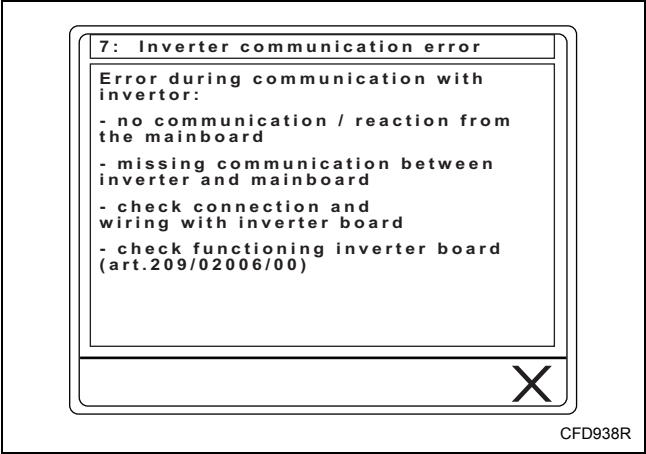


Figure 10

Press the Start/Stop keypad to return.

## 2. Info Sub-Menu

The Info Sub-Menu allows the operator to view technical information about the machine, configurations and cycle programs.

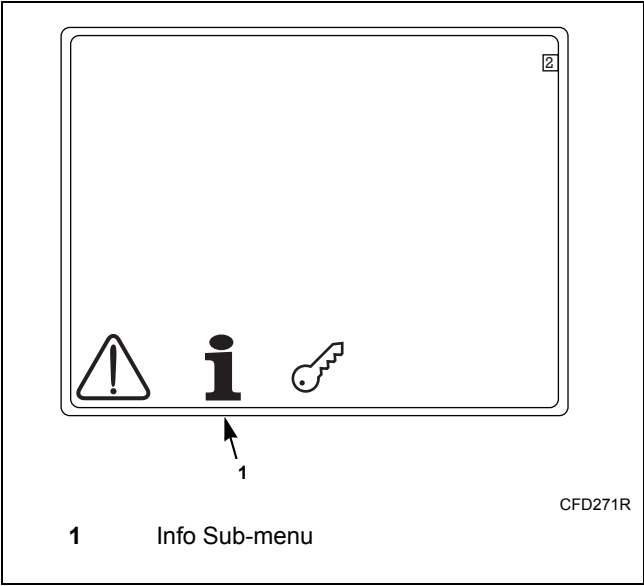
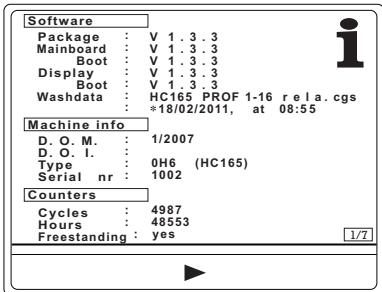
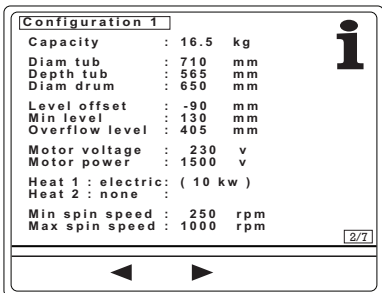
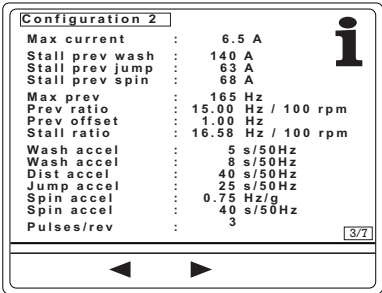
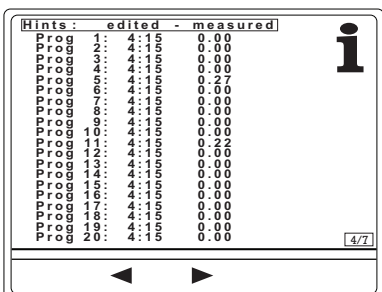


Figure 11

To access the Info Sub-Menu, press the keypad below the Info Sub-Menu icon. Refer to *Figure 11*.

## The Non-Active Menu

 <p>CFD276R</p>	<p><b>Screen 1/7:</b> Software version Machine info (date of manufacture, serial number, etc.) and counters</p> <p>Press the keypads below the Navigation icon to view the next or previous screen.</p> <p>Press the Start/Stop keypad to return.</p>
 <p>CFD277R</p>	<p><b>Screen 2/7:</b> Configuration 1 Machine configuration</p> <p>Press the keypads below the Navigation icons to view the next or previous screen.</p> <p>Press the Start/Stop keypad to return.</p>
 <p>CFD278R</p>	<p><b>Screen 3/7:</b> Configuration 2 Data relating to the frequency inverter.</p> <p>Press the keypads below the Navigation icons to view the next or previous screen.</p> <p>Press the Start/Stop keypad to return.</p>
 <p>CFD279R</p>	<p><b>Screen 4/7:</b> Edited and measured times of the cycle programs.</p>

(Continued Table 6)

(Continued Table 6)

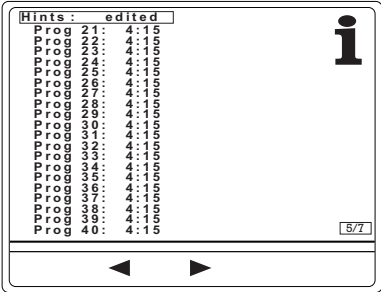
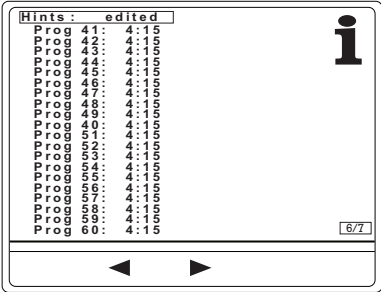
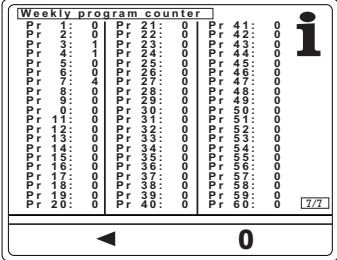
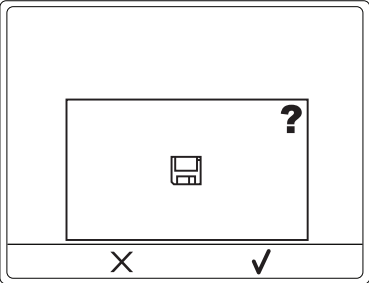
<div></div> <div>CFD280R</div>	<p><b>Screen 5/7:</b></p> <p>Edited and measured times of the cycle programs (continued).</p>
<div></div> <div>CFD281R</div>	<p><b>Screen 6/7:</b></p> <p>Edited and measured times of the cycle programs (continued).</p>
<div></div> <div>CFD282R</div>	<p><b>Screen 7/7:</b></p> <p>Overview of the weekly counts per cycle (the number of times that each cycle has been executed during the last 7 days).</p> <p>Press the keypad below the 0 in order to reset the counters.</p>
<div></div> <div>CFD283R</div>	<p>Press the keypad below the Check icon to confirm the reset, or press the keypad below the X to cancel.</p>

Table 6

## The Non-Active Menu

### 3. Advanced Functions Sub-Menu

The Advanced Functions Sub-Menu allows the operator to test machine components, create or edit a cycle or modify the machine's settings.

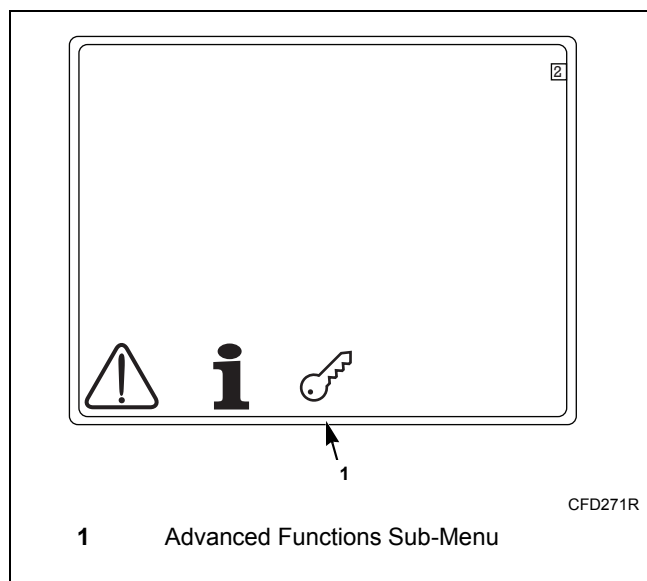


Figure 12

To access the Advanced Functions Sub-Menu, press the keypad below the Advanced Functions Sub-Menu, icon. Refer to *Figure 12*.

### *“Advanced functions” Access Code Menu*

The operator must have the security code to access advanced functions.

Enter the password using the keypads below the Navigation icons and press the keypad below the Check icon to confirm.

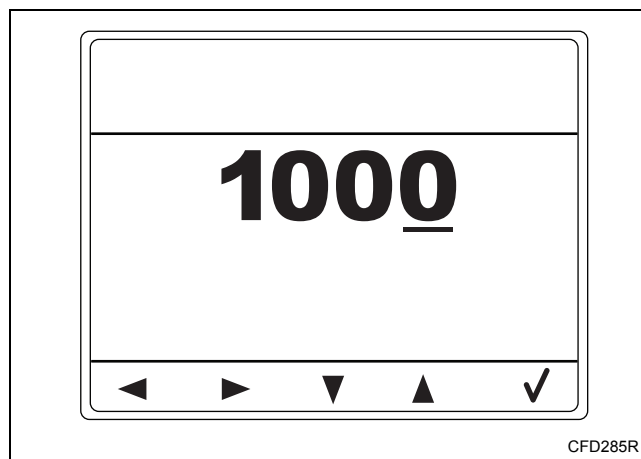


Figure 13

The security code is 1000 by default.

The Advanced Functions Sub-Menu is now displayed.

Press the Start/Stop keypad to return.

### 3.1 Test Menu

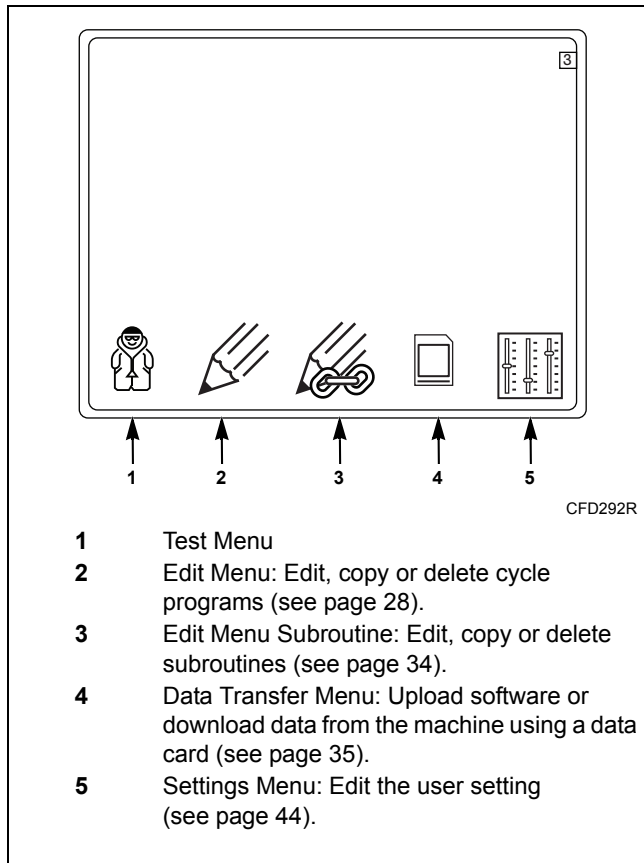


Figure 14

The Test Menu allows the operator to test the operation of certain electrical components of the machine.

To access the Test Menu from the Advanced Functions Sub-Menu, press the keypad below the corresponding icon.

**NOTE: Empty the drum completely before running the test program.**

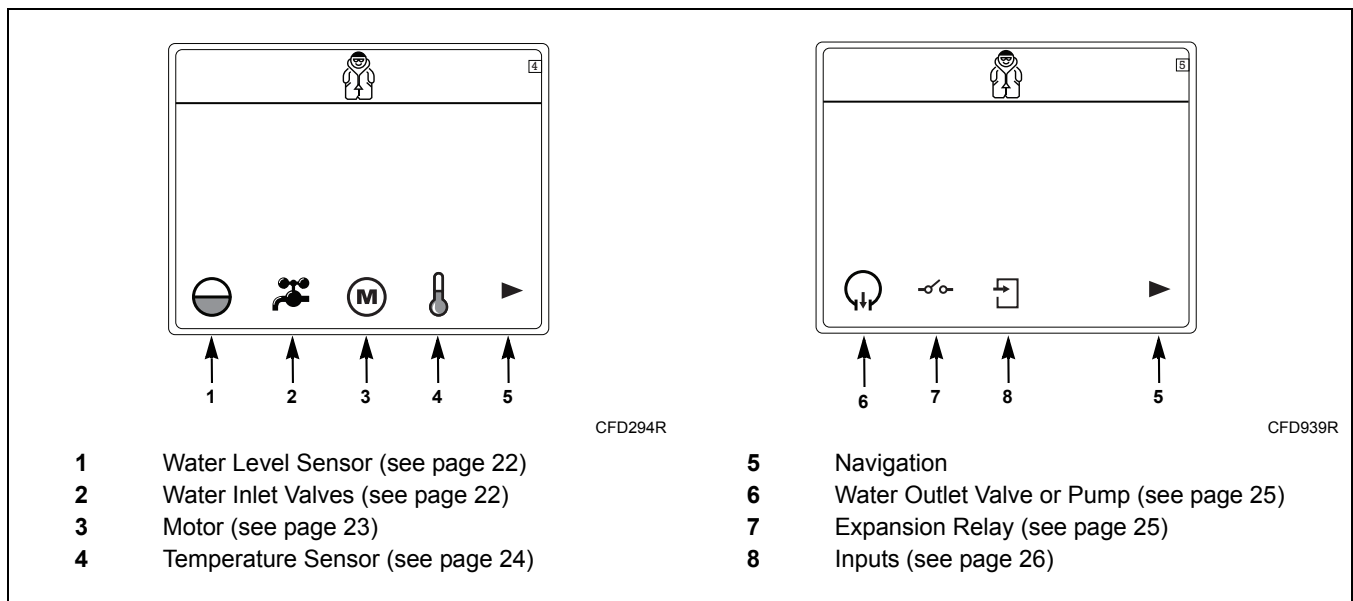


Figure 15

The Non-Active Menu

Advanced Functions Sub-Menu/Test Menu/  
Water Level Sensor

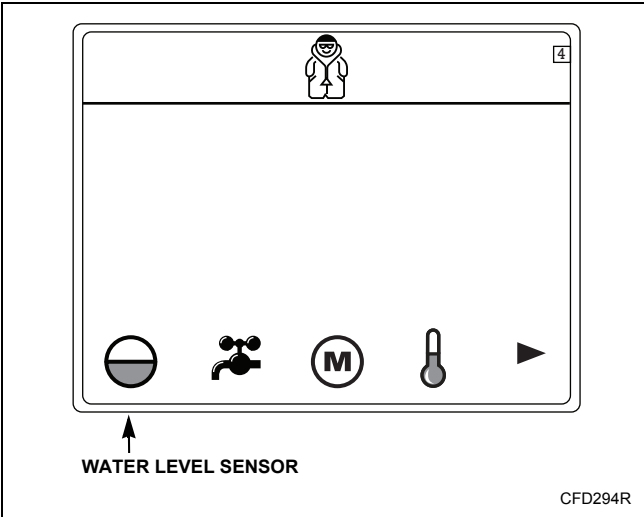


Figure 16

To access the Water Level Sensor display, from the Test Menu, press the keypad below the corresponding icon. Refer to *Figure 16*.

Allows the operator to set the zero level and calibrate the water level sensor.

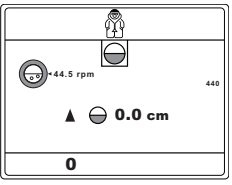
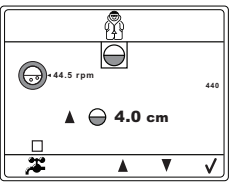
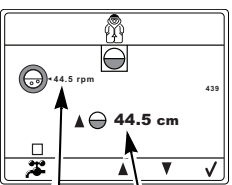
Setting the Zero Level	
	Make sure all the water has been emptied.  If necessary, stop the power to the machine for a few minutes. Then press the keypad below the 0 to establish the “zero level”.
Calibrating the Sensor	
	To do this, first place a marker in the <i>middle of the door window</i> .  Then press the keypad below the Water Inlet icon to fill the machine. Press the keypad again to stop filling when the water reaches the marker.
	Compare the measured level against the theoretical level and, if necessary, adjust the measured value using the keypads below the Navigation icons and confirm by pressing the keypad below the Check icon.  Press the Start/Stop keypad to exit this test.

Table 7

Advanced Functions Sub-Menu/Test Menu/  
Water Inlet Valves

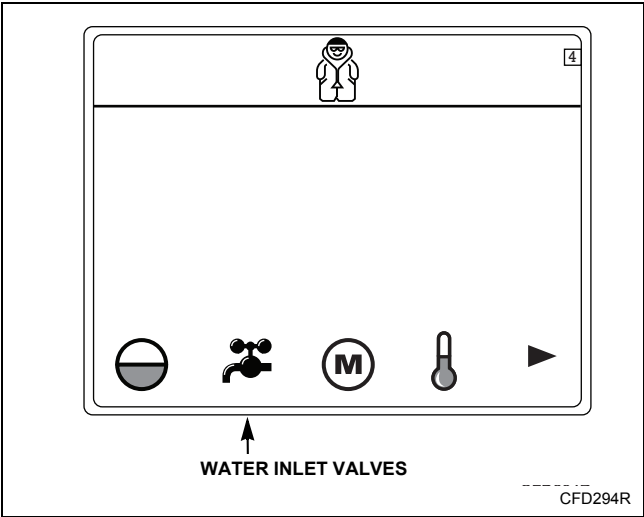


Figure 17

To access the Water Inlet Valves display, from the Test Menu, press the keypad below the corresponding icon. Refer to *Figure 17*.

Allows the operator to activate the water inlet valves.

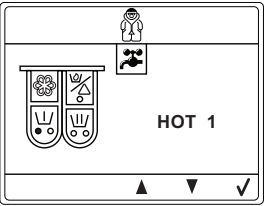






	Use the keypads below the Navigation icons to select one or more valves and press the keypad below the Check icon to activate the selected valve.  Press the Start/Stop keypad to exit this test.
	Hot water - pre-wash compartment
	Hot water - softener compartment
	Hot water - main wash compartment
	Cold water - pre-wash compartment
	Cold water - bleach compartment
	Cold water - main wash compartment

Table 8



Advanced Functions Sub-Menu/Test Menu/  
Motor

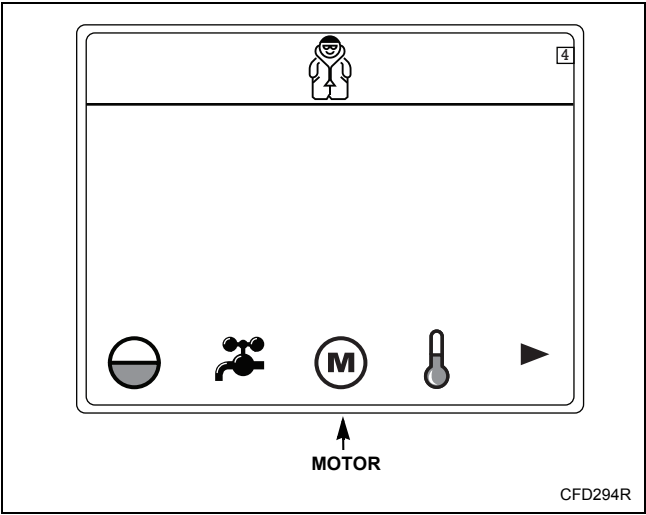


Figure 18

To access the Motor display, from the Test Menu, press the keypad below the corresponding icon. Refer to *Figure 18*.

Allows the operator to test the operation of the motor and frequency inverter.

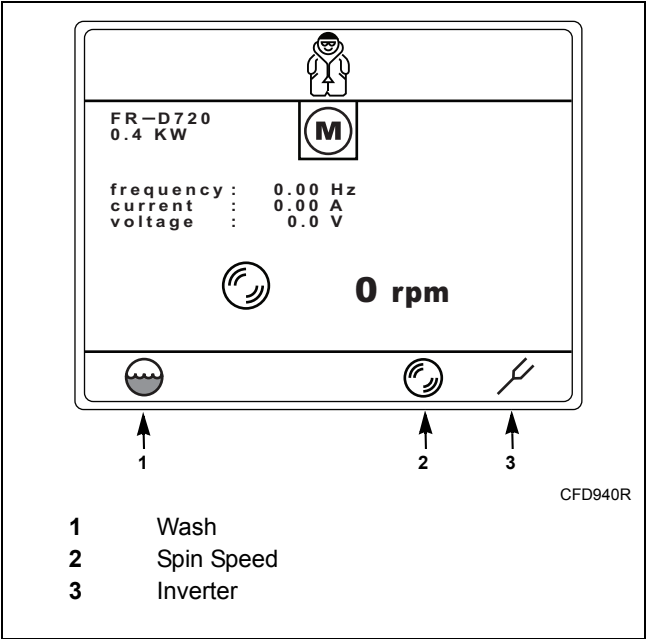


Figure 19

<b>Checking the wash speed</b>	
<p>CFD310R</p>	Press the keypad below the Wash icon (refer to <i>Figure 14</i> ) to bring the drum up to wash speed.
<p>CFD311R</p>	Press the keypad below the Rotation icon (as shown).
<b>Checking the spin speed</b>	
<p>CFD312R</p>	The system will display the time it takes the rotation sensor to detect a spoke of the belt pulley. <b>on</b> = detect <b>off</b> = do not detect The system also displays the detection ratio as a percentage.
<p>CFD313R</p>	Press the keypad below the Spin Speed icon (refer to <i>Figure 19</i> ) to bring the drum to a spin speed of 500 rpm.
<p>CFD315R</p>	If the machine has a maximum spin speed of less than 500 rpm, this number will be rounded down to the nearest lower one hundred.
<b>Checking the spin time</b>	
<p>CFD315R</p>	Once the drum has spun for a few seconds at 500 rpm (to measure the revolution frequency ratio), press the keypad below the left Up/Down icons to increase the spin speed (depending on the machine type).
<b>Adjusting the spin time</b>	
<p>CFD315R</p>	Press the keypads below the right Up/Down icons to adjust the spin time, if necessary.
<b>Spin time passed</b>	
<p>CFD315R</p>	Once the spin time has passed, the drum will slow down and the spin speed will be displayed.

(Continued Table 9)

The Non-Active Menu

(Continued Table 9)

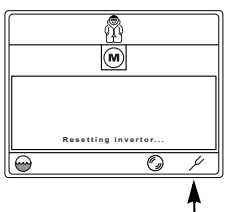
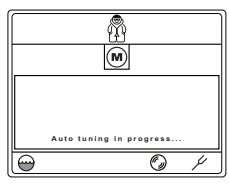
Tuning the frequency inverter to the motor	
 CFD317R	<p>This will need to be performed every time a new motor or frequency inverter is fitted.</p> <p>Press the keypad below the Inverter icon to start the adjustment. Refer to <i>Figure 19</i>.</p>
 CFD318R	<p>The frequency inverter is first reset (<b>Resetting inverter...</b>), then the motor and inverter are tuned (<b>Auto tuning in progress...</b>).</p> <p>Press the Start/Stop keypad to exit the motor test.</p>

Table 9

Advanced Functions Sub-Menu/Test Menu/  
Temperature Sensor

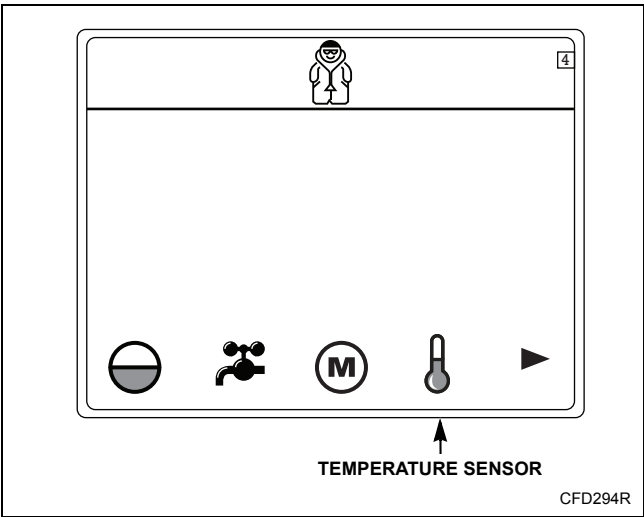


Figure 20

To access the Temperature Sensor display, from the Test Menu, press the keypad below the corresponding icon. Refer to *Figure 20*.

Allows the operator to test the operation of the temperature sensor.

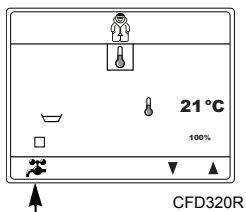
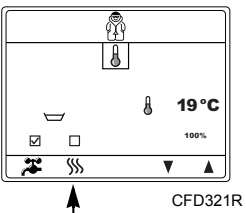
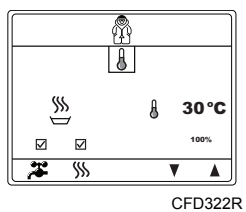
 CFD320R	<p>Press the keypad below the Water Inlet icon (as shown) to start the test.</p> <p>The temperature measured by the sensor is displayed.</p>
 CFD321R	<p>Water will fill until it reaches the safety level.</p> <p>The Heat icon will appear (as shown).</p>
 CFD322R	<p>Press the keypad below the Heat icon to switch the heating elements on or off.</p> <p>While the heating elements are on, the temperature will reach a maximum of 90°C.</p> <p>Press the Start/Stop keypad to exit this test.</p>

Table 10

Advanced Functions Sub-Menu/Test Menu/  
Water Outlet Valve or Drain Pump

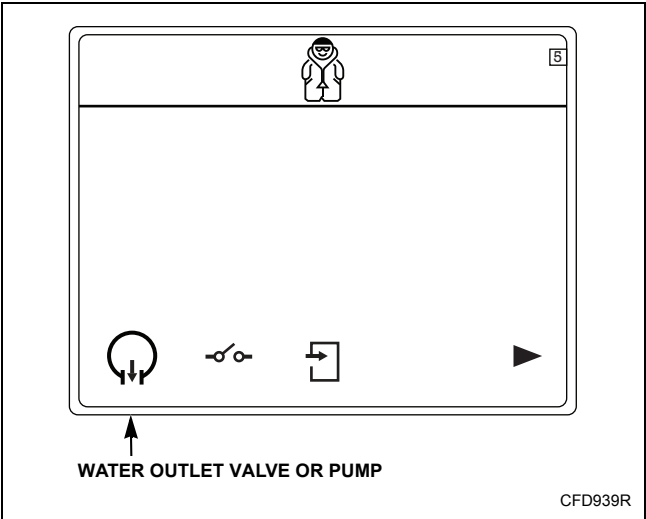


Figure 21

To access the Water Outlet Valve or Drain Pump display, from the Test Menu, press the keypad below the corresponding icon. Refer to *Figure 21*.

Allows the operator to test the operation and seal of the outlet valves or pump.

Advanced Functions Sub-Menu/Test Menu/  
Expansion Relay

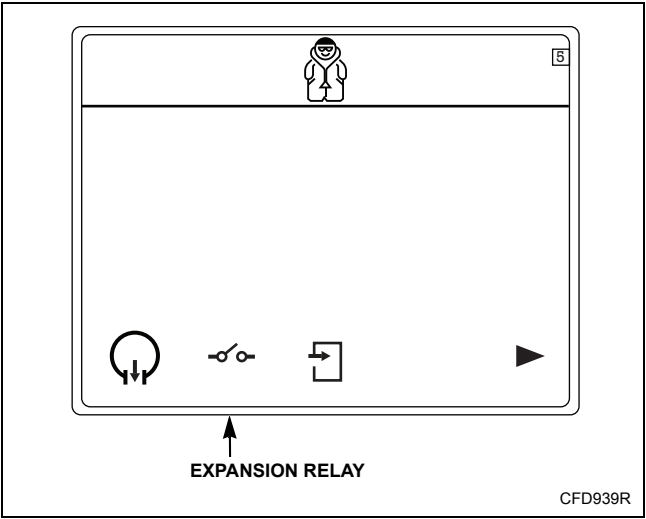


Figure 22

To access the Expansion Relay display, from the Test Menu, press the keypad below the corresponding icon. Refer to *Figure 22*.

Allows the operator to activate the (optional) expansion relay.


# The Non-Active Menu

## Advanced Functions Sub-Menu/Test Menu/Inputs

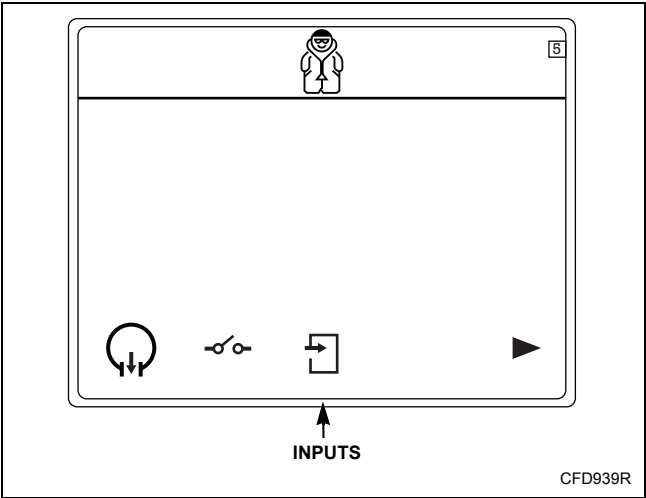


Figure 24

To access the Inputs display, from the Test Menu, press the keypad below the corresponding icon. Refer to *Figure 24*.

Allows the operator to test the inputs.

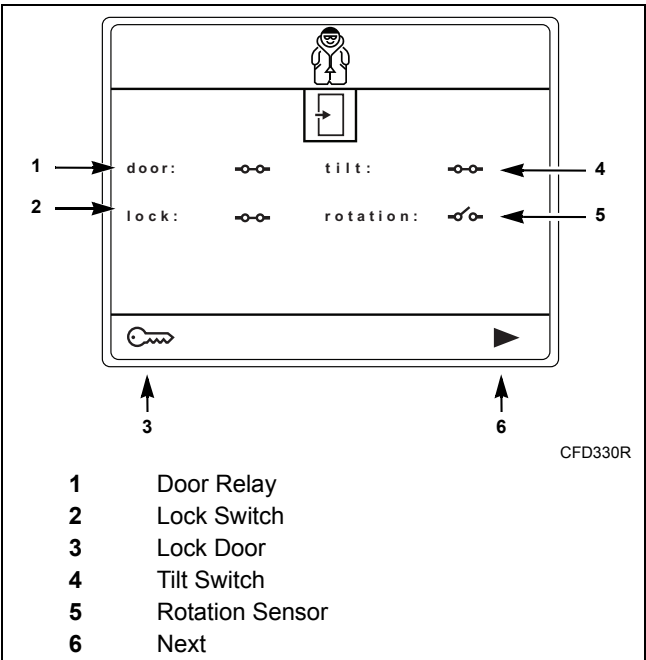


Figure 25

- 1 Door Relay
- 2 Lock Switch
- 3 Lock Door
- 4 Tilt Switch
- 5 Rotation Sensor
- 6 Next

An input contact is displayed as open or closed, depending on its current status. Refer to *Figure 26*.

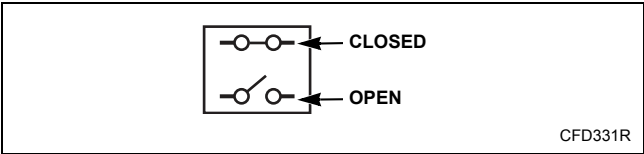


Figure 26

### Test the inputs

1. **Door closed input:** while observing the Door Relay display (refer to *Figure 25*), open and close the machine's door. The Door Relay display should change from close to open as the door is opened and from open to close as the door is closed.

**Door lock input:** close the machine's door. While observing the Lock Switch display (refer to *Figure 25*), press the keypad below the Door Lock icon (refer to *Figure 25*), to lock and unlock the door. The Lock Switch display should change from open to close as the door is locked and close to open as the door is unlocked.

**Tilt input:** while observing the Tilt Switch display (refer to *Figure 25*), manually move the tilt switch. The Tilt Switch display should change from close to open as the tilt switch comes into contact with the cutout in the tilt switch bracket.

2. **Rotation input:** open the machine's door. While observing the Rotation Sensor display (refer to *Figure 25*), manually rotate the machine's basket. The Rotation Sensor display should change from open to close as the basket is rotated and the RPM sensor detects a pulley spoke.

Press the Start/Stop keypad to exit the inputs test.

## Input Relay Card

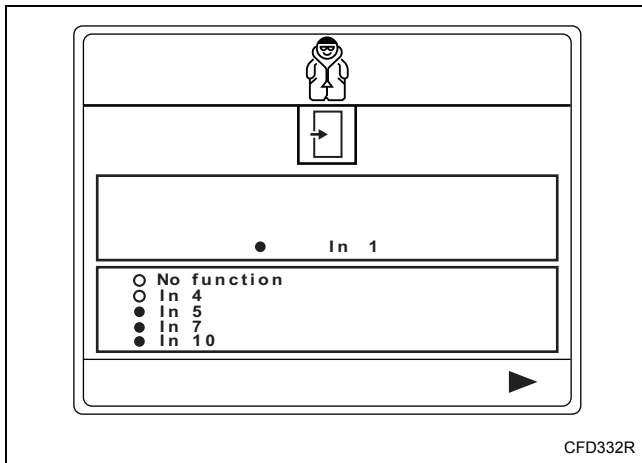


Figure 27

Press the keypad below the Next icon to view the Input Relay Card display. More or less inputs may be displayed, depending on the model of machine.

When an input is activated, “●” is displayed. When an input is not activated, “○” is displayed.

3.2 Edit Menu

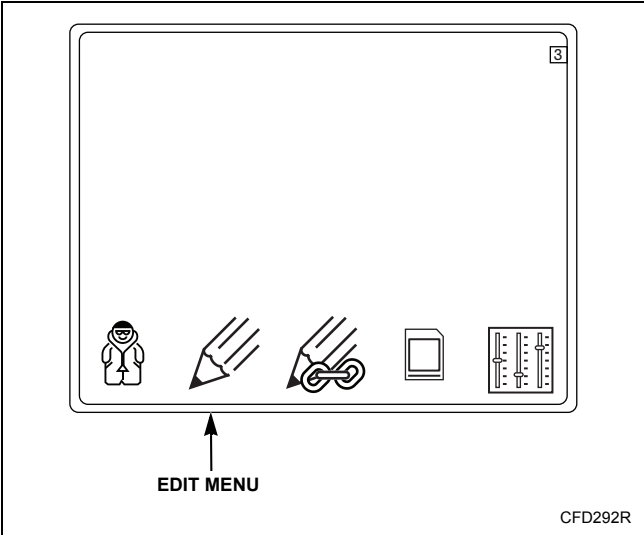


Figure 28

To access the Edit Menu, from the Advanced Functions Sub-Menu, press the keypad below the corresponding icon. Refer to *Figure 28*.

Allows the operator to create, edit, copy or delete cycle programs.

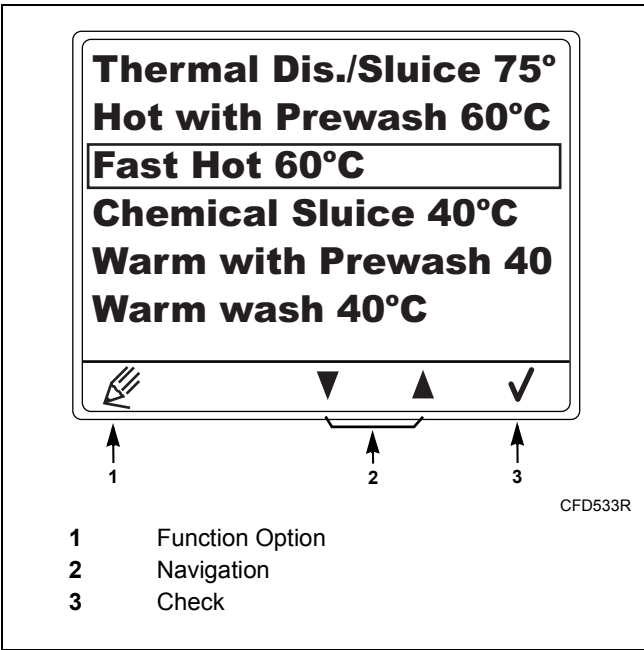


Figure 29

Edit, copy, delete or create a cycle program

1. Select a program to edit by pressing the keypads below the Navigation icons. Refer to *Figure 29*.
2. Press the keypad below the Function Option icon to change the function. Refer to *Table 12*.






 CFD335R	Edit a program (see page 29)
 CFD336R	Copy a program (see page 32)
 CFD337R	Delete a program (see page 32)
 CFD338R	Create a new program (see page 33)
 CFD339R	Modify a program title (see page 33)

Table 12

3. Press the keypad below the Check icon to confirm the function. Refer to *Figure 29*.
4. When finished editing, press the Start/Stop keypad to exit the Edit Menu.

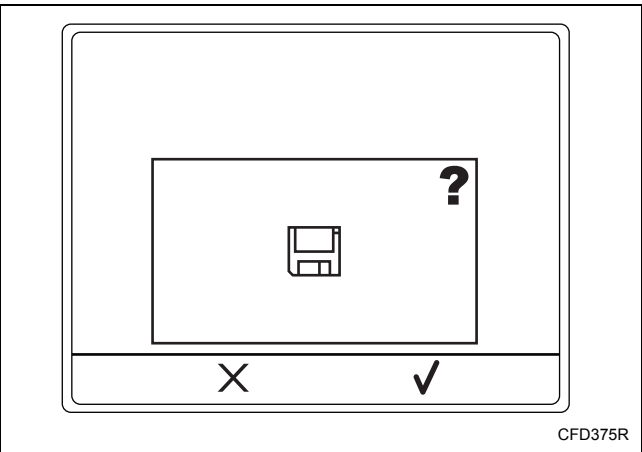


Figure 30

Confirm to save any changes made by pressing the keypad below the Check icon, or cancel by pressing the keypad below the X. Refer to *Figure 30*.

Edit Menu/Edit Program

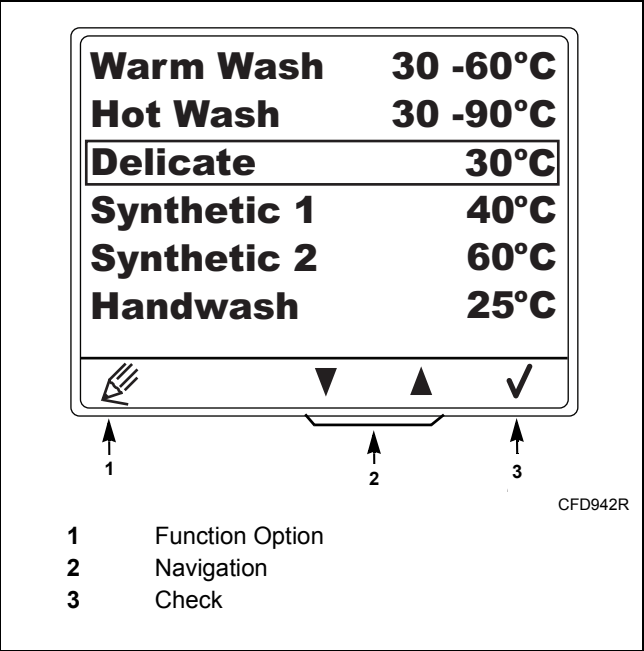


Figure 31

To access the Edit Program function, from the Edit Menu display, press the keypad below the Function Option until the Edit Program icon appears (as shown). Press the keypad below the Check icon. Refer to *Figure 31*.

Allows the operator to edit the selected cycle program. All values for water level, water temperature, wash movement, etc., can be changed. The operator can also add, move or delete cycle phases and steps.

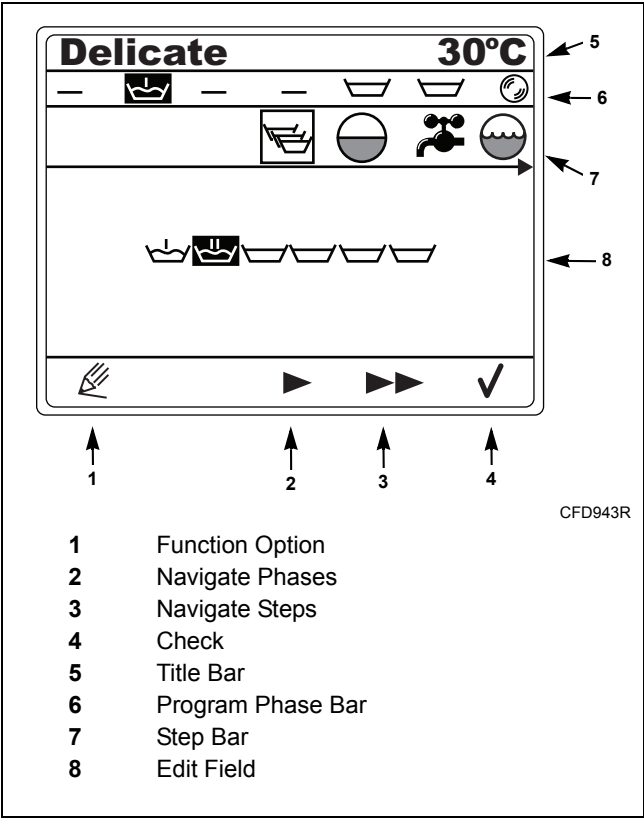


Figure 32

The Non-Active Menu

Edit program steps

1. Press the keypads below the Navigate Phases icons until the correct phase is highlighted in the Program Phase Bar.

2. Press the keypads below the Navigate Steps icons until the correct step is highlighted in the Step Bar.

3. Press the keypad below the Function Option to change the function. Refer to *Figure 13*.
4. Press the keypad below the Check icon to confirm the function.


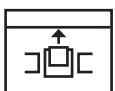
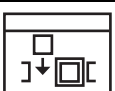
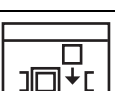
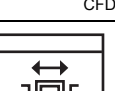
 CFD335	Edit settings for the selected step
 CFD343	Delete the selected step
 CFD344	Insert a step <i>before</i> the selected step
 CFD345	Insert a step <i>behind</i> the selected step
 CFD347	Move the selected step




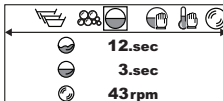
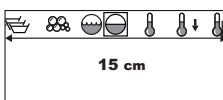



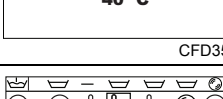
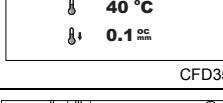
Table 13



## Edit step values

Every step has its own values which can be selected and changed as shown using the selection keypads (refer to *Figure 32.*)

### Description of the values for each step

Description of the values for each step	
 <p>CFD348R</p>	<b>Wash phase:</b> Indication of the step.
 <p>CFD349R</p>	<b>Water inlet:</b> The water inlet valves.
 <p>CFD350R</p>	<b>Water level:</b> The water level and load-dependent filling.
 <p>CFD351R</p>	<b>Wash action:</b> The wash action time, the wash stop time and the wash speed.
 <p>CFD352R</p>	<b>Water level time stop:</b> The water level to be reached before the cycle program continues.
 <p>CFD353R</p>	<b>Soap inlet:</b> The soap inlets via the powder tray and activation of the liquid soap pumps (time).
 <p>CFD354R</p>	<b>Heating:</b> The target temperature for the tub and controlled fill via hot and cold water mix.
 <p>CFD355R</p>	<b>Heating time stop:</b> The temperature the tub has to reach before the cycle program continues.
 <p>CFD356R</p>	<b>Controlled cool down:</b> The temperature to which the tub must drop via controlled cool down and the speed of cooling.
 <p>CFD357R</p>	<b>Controlled heating:</b> The temperature to which the tub must rise via controlled heating and the speed of heating.

(Continued Table 14)

(Continued Table 14)


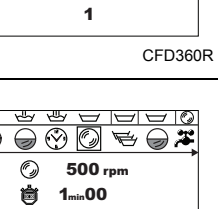
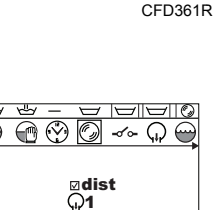
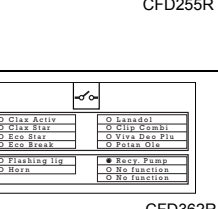
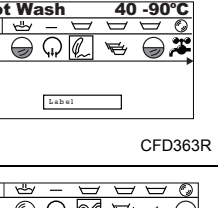
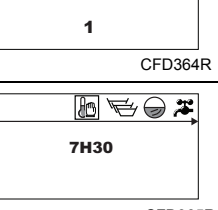
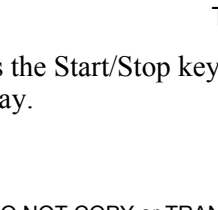

 <p>CFD358R</p>	<p><b>Time:</b> The duration of the last step.</p>
 <p>CFD359R</p>	<p><b>Waiting:</b> The time during which the cycle program will temporarily stop and the explanation.</p>
 <p>CFD360R</p>	<p><b>Drain:</b> The drain valve or drain pump.</p>
 <p>CFD361R</p>	<p><b>Spin:</b></p> <ul style="list-style-type: none"> <li>• Spin speed.</li> <li>• Spin time.</li> <li>• Maximum number of attempts to resume spin after a tilt.</li> <li>• Wool washing: immediate start with distribution speed in the spin cycle.</li> <li>• Outlet valve: selection of outlet valve 1 or 2.</li> <li>• or</li> <li>• Spin with distribution speed only.</li> <li>• Outlet valve: selection of outlet valve 1 or 2.</li> </ul>
 <p>CFD255R</p>	<p><b>Relay contact:</b> The number of relay contacts available.</p>
 <p>CFD363R</p>	<p><b>Comment:</b> Info text.</p>
 <p>CFD364R</p>	<p><b>Subroutine:</b> The available subroutines.</p>
 <p>CFD365R</p>	<p><b>Programmed start time:</b> The time when the program starts.</p>

Table 14

Press the Start/Stop keypad to return to the Edit Menu display.

The Non-Active Menu

Advanced Functions/Edit Menu/Copy Program

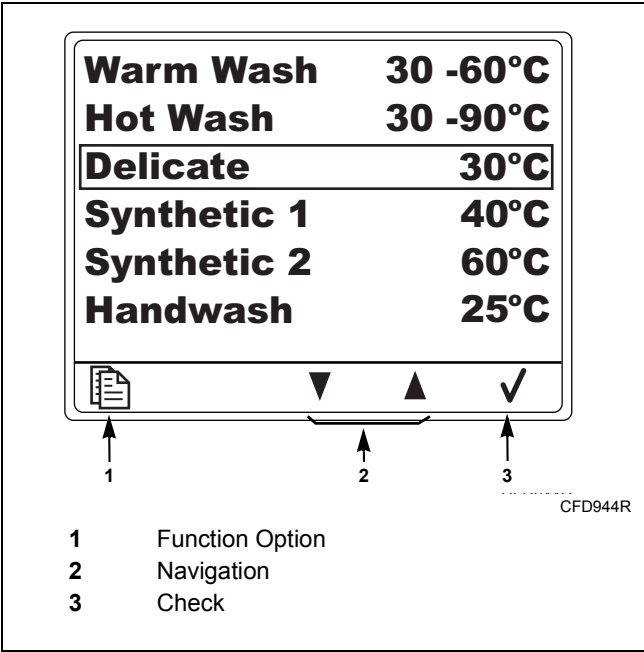


Figure 33

To access the Copy Program function, from the Edit Menu display, press the keypad below the Function Option until the Copy Program icon appears (as shown). Press the keypad below the Check icon. Refer to *Figure 33*.

Allows the operator to create a new program by copying a selected program and then editing the copied program.

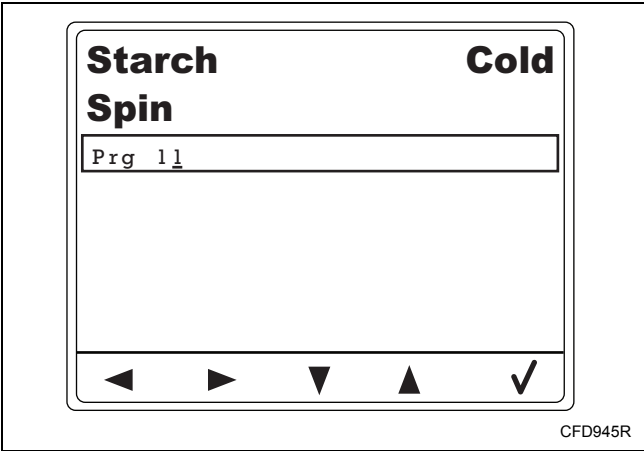


Figure 34

The copy program will be placed at the end of the program list.

Advanced Functions/Edit Menu/Delete Program

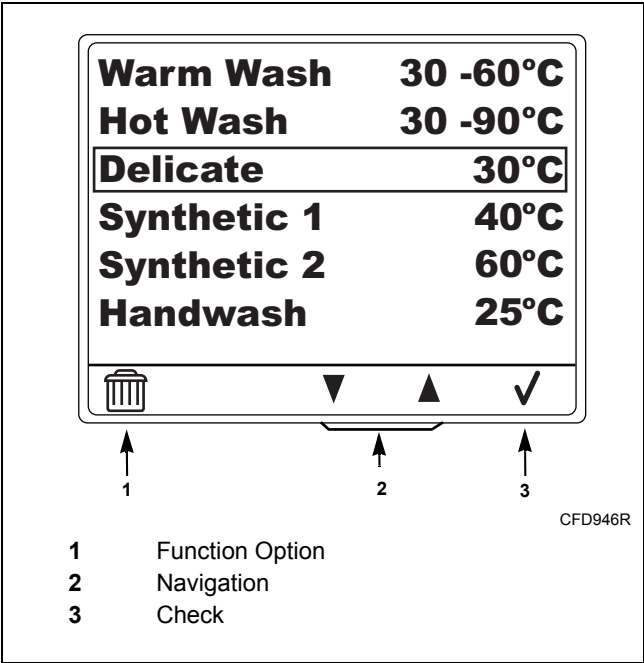


Figure 35

To access the Delete Program function, from the Edit Menu display, press the keypad below the Function Option until the Delete Program icon appears (as shown). Press the keypad below the Check icon. Refer to *Figure 35*.

Allows the operator to delete a selected program.

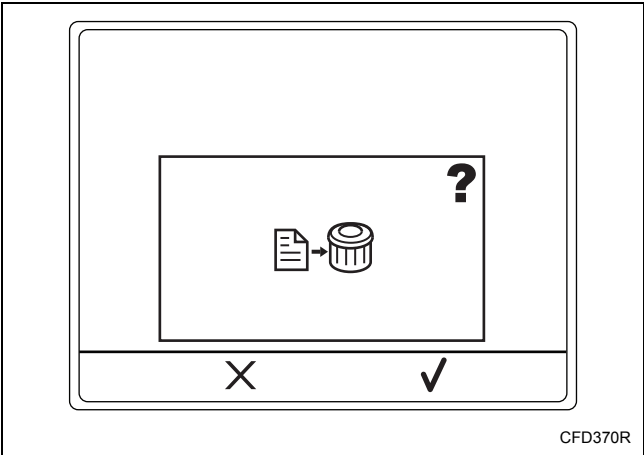


Figure 36

Confirm by pressing the keypad below the Check icon or cancel by pressing the keypad below the X. Refer to *Figure 36*.

When this is done, the Edit Menu will appear.

Advanced Functions/Edit Menu/Create New Program

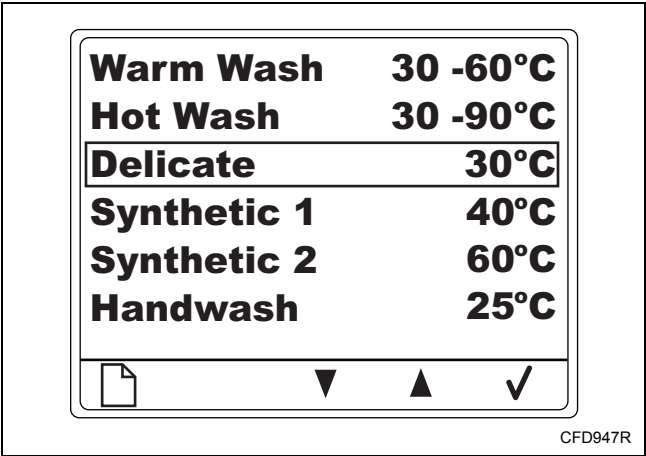
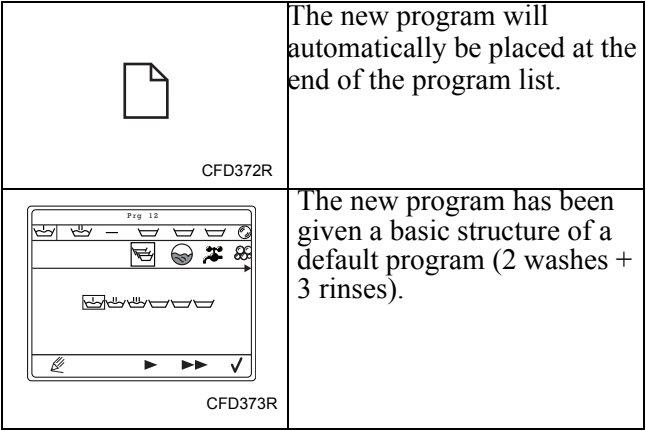


Figure 37

To access the Create New Program function, from the Edit Menu display, press the keypad below the Function option until the Create New Program icon appears (as shown). Press the keypad below the Check icon. Refer to *Figure 37*.

Allows the operator to create a new program.



The new program can be edited as described under Edit Program (see page 29).

Advanced Functions/Edit Menu/Modify Program Title

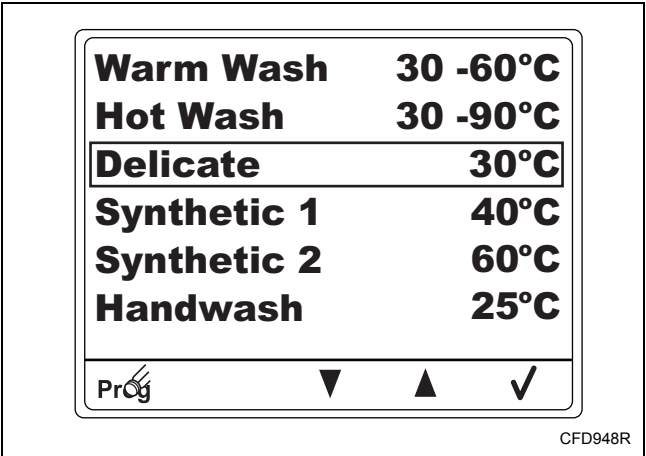


Figure 38

To access the Modify Program Title function, from the Edit Menu display, press the keypad below the Function Option until the Modify Program title icon appears (as shown). Press the keypad below the Check icon. Refer to *Figure 38*.

Allows the operator to modify the title of a program.

**NOTE: Modifying the program's title is only possible when the text is not a bitmap. When copying or creating new cycles on the machine, these cycles will have a text title. Refer to *Figure 34*.**

3.3 Edit Menu Subroutine

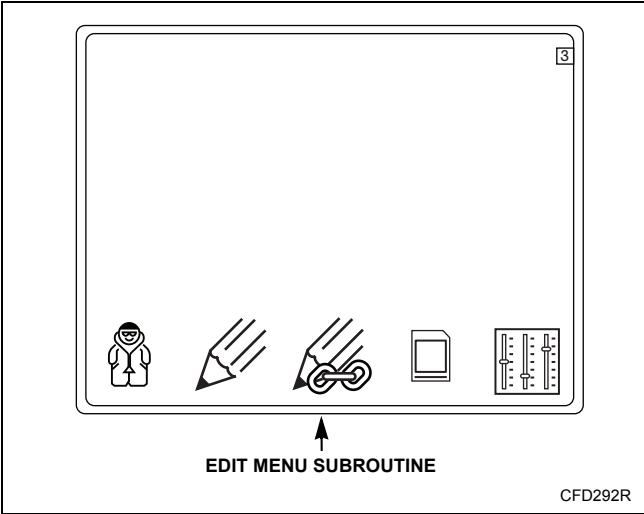


Figure 39

To access the Edit Menu Subroutine, from the Advanced Functions Sub-Menu, press the keypad below the corresponding icon. Refer to *Figure 39*.

Allows the operator to edit, copy, delete or create new subroutines. A subroutine is a block of steps grouped together for insertion into a program. This enables the operator to create programs faster by placing identical program phases (such as rinses) in a subroutine.

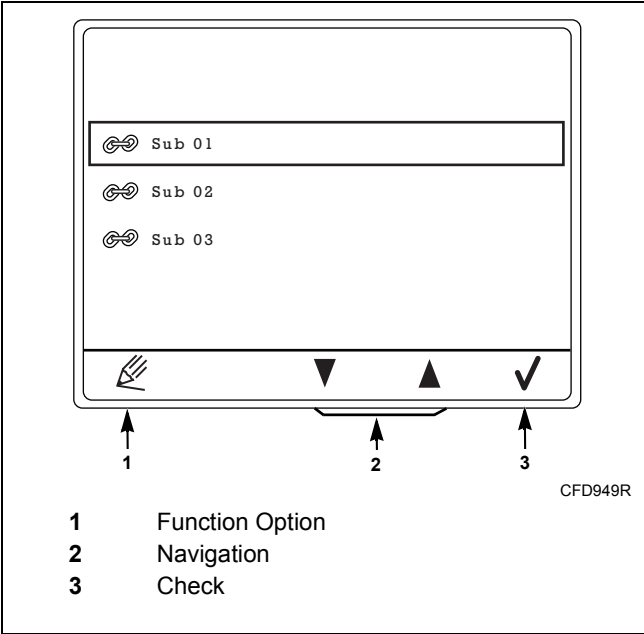


Figure 40

Edit, copy, delete or create a subroutine

1. Select a subroutine to edit by pressing the keypads below the Navigation icons. Refer to *Figure 40*.
2. Press the keypad below the Function Option to change the function. Refer to *Figure 40* and *Table 15*.


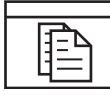
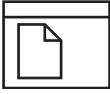


 CFD335R	Edit subroutine
 CFD336R	Copy subroutine
 CFD337R	Create a new subroutine
 CFD338R	Delete subroutine
 CFD339R	Modify a subroutine title

Table 15

3. Press the keypad below the Check icon to confirm the function. Refer to *Figure 40*.
4. Subroutines can be built, edited, copied or deleted in the same way as wash programs (see *Edit Menu*).

***However, one subroutine cannot be inserted into another.***

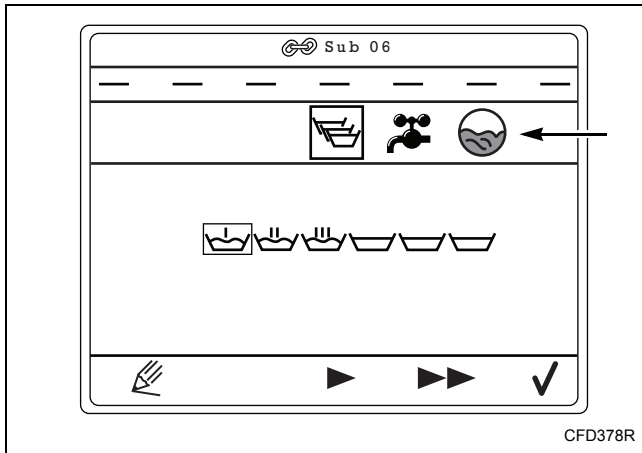


Figure 41

To create a new subroutine, start a basic subroutine. It can then be edited in the same way as a cycle program (see **Edit Program**).

The steps bar displays the content.

Press the Start/Stop keypad to exit the Edit Subroutine Menu.

5. Save changes (refer to *Figure 41*).

### 3.4 Data Transfer Menu

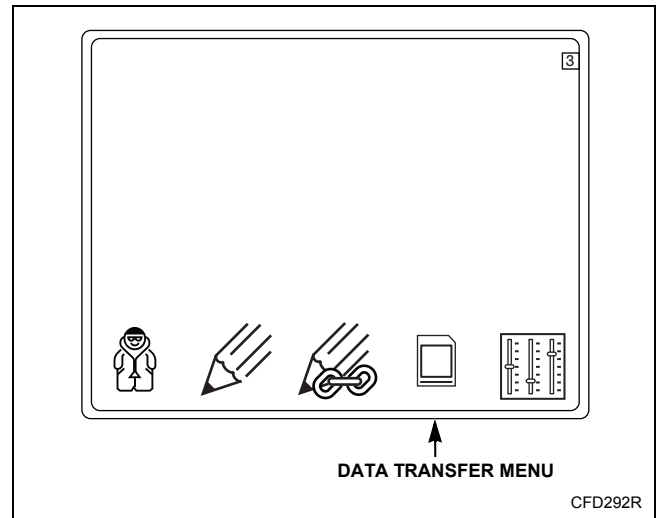


Figure 42

To access the Data Transfer Menu, from the Advanced Functions Sub-Menu, press the keypad below the corresponding icon. Refer to *Figure 42*.

Allows the user to upload software or download data from the machine using an SD card.

1. The “insert card” display will appear. Refer to *Figure 43*.

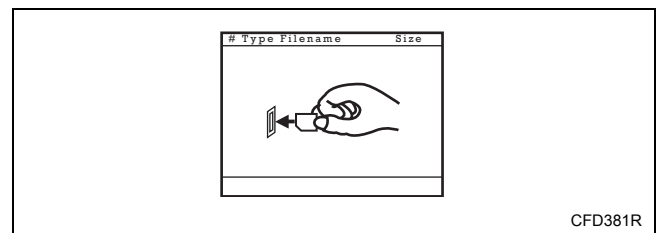


Figure 43

2. Put the SD card into the slot at the front of the control panel. Refer to *Figure 44*.

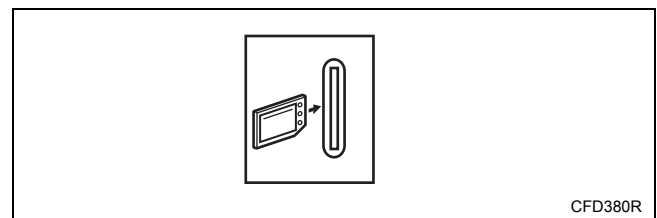


Figure 44

If there is no slot, the operator can insert the SD card into the card holder on the inside of the control panel. To do this, the operator must remove the cover from the machine.

The Data Transfer Menu will appear. Refer to *Figure 45*.

## The Non-Active Menu

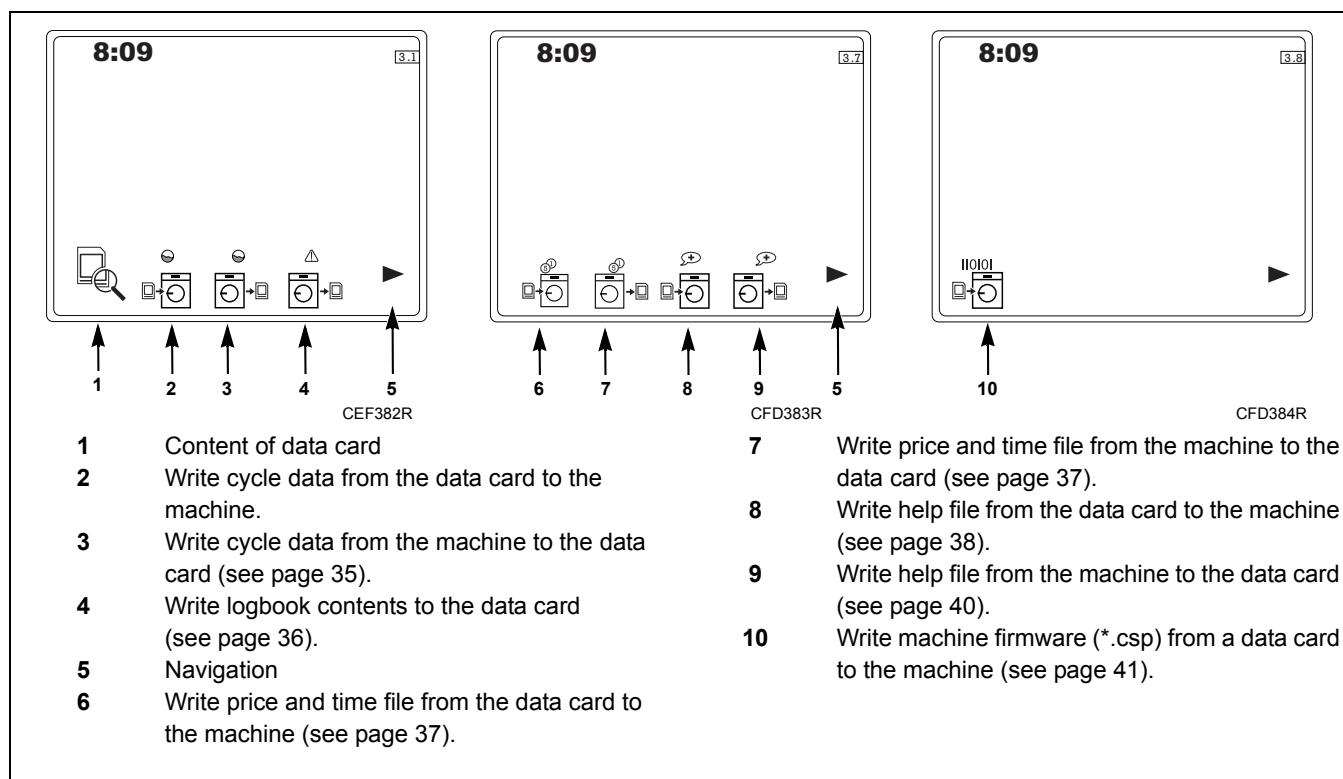


Figure 45

An hourglass symbol will appear while data is being transferred.

**IMPORTANT: Do not remove the SD card while the hourglass is present.**

**Advanced Functions Sub-Menu/Data Transfer Menu/Write Cycle Data from the Machine to the Data Card**

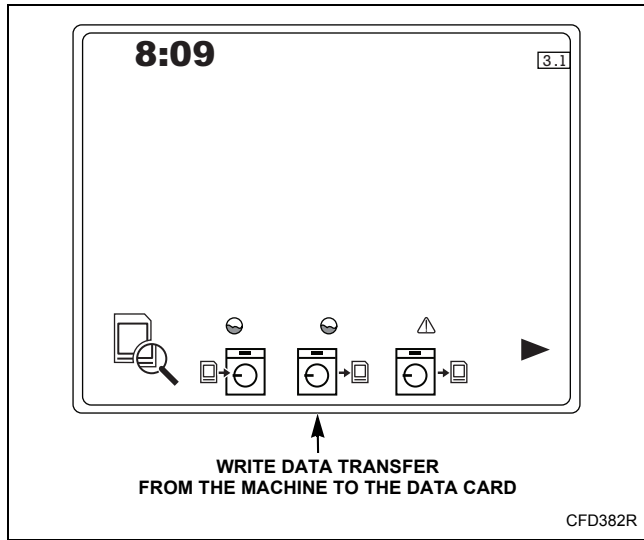


Figure 46

To access the Write Data from the Machine to the Data Card function, from the Data Transfer Menu, press the keypad below the corresponding icon. Refer to *Figure 46*.

Allows the operator to write cycle date (cycle programs) from the machine to the data card.

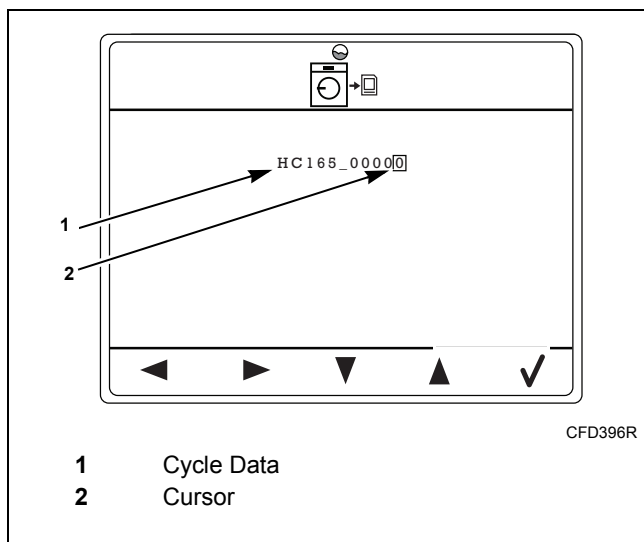


Figure 47

The cycle data is displayed as shown. Refer to *Figure 47*. If necessary, the name of the file can be changed.

**Changing the File Name**

1. Move the cursor using the keypads below the Left/Right icons to select a letter or figure or to add a letter or figure. Refer to *Figure 47*.
2. Change the letters and figures using the keypads below the Up/Down icons. Refer to *Figure 47*.
3. Press the keypad below the Check icon to write the data to the data card. Refer to *Figure 47*.

An hourglass symbol will appear while writing.

4. Press the Start/Stop keypad to return to the Data Transfer Menu.

## The Non-Active Menu

### Advanced Functions Sub-Menu/Data Transfer Menu/Write Logbook Contents to the Data Card

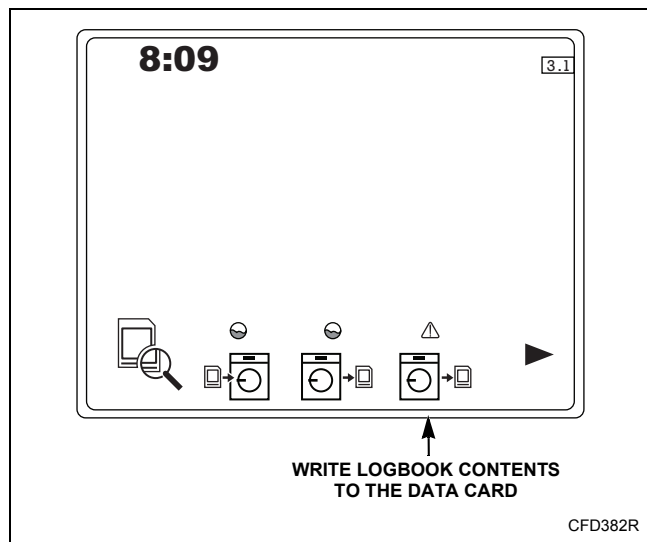


Figure 48

To access the Write Logbook Contents to the Data Card function, from the Data Transfer Menu, press the keypad below the corresponding icon. Refer to *Figure 48*.

Allows the operator to write the logbook contents from the machine to the data card.

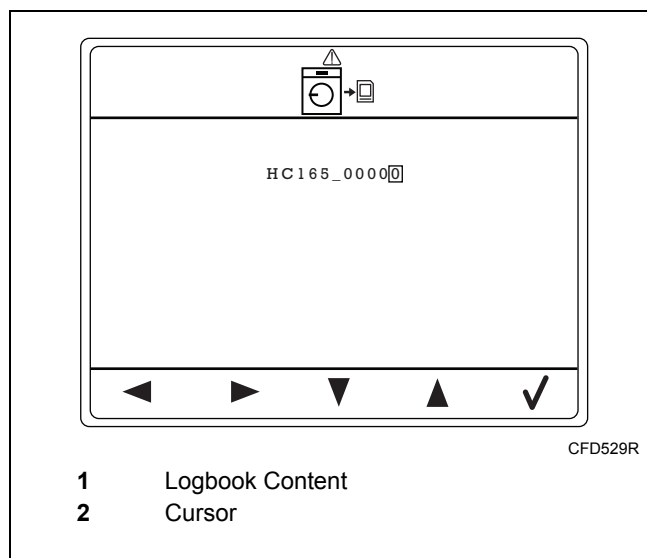


Figure 49

The logbook content file is displayed as shown. Refer to *Figure 49*. If necessary, the name of the file can be changed.

### Changing the File Name

1. Move the cursor using the keypads below the Left/Right icons to select a letter or figure or to add a letter or figure. Refer to *Figure 49*.
2. Change the letters and figures with using the keypads below the Up/Down icons. Refer to *Figure 49*.
3. Press the keypad below the Check icon to write the data to the data card. Refer to *Figure 49*.  
An hourglass symbol will appear while writing.
4. Press the Start/Stop keypad to return to the Data Transfer Menu.



Advanced Functions Sub-Menu/Data  
Transfer Menu/Content of Data Card

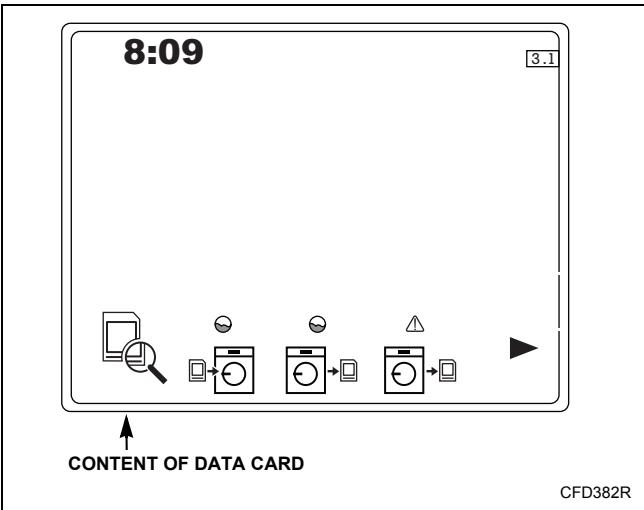


Figure 50

To access the Content of Data Card display, from the Data Transfer Menu, press the keypad below the corresponding icon. Refer to *Figure 50*.

Allows the operator to read the content of the data card.  
Refer to *Table 16*.

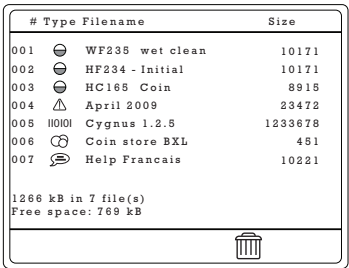

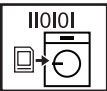

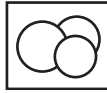

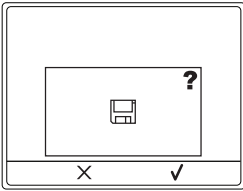
 <p>DELETE</p> <p>CFD386R</p> <p>Several types of data can be stored.</p>	 <p>CFD387R</p>	Cycle programs (.cgs)
	 <p>CFD951R</p>	Machine operating software (firmware) (.csp)
	 <p>CFD389R</p>	History (.chi)
	 <p>CFD390R</p>	Price and time file (.cpr)
	 <p>CFD391R</p>	Help file (.chf)
 <p>CFD375R</p>	<p>Press the keypad below the Delete icon (above) to delete all the data from the data card. Confirm by pressing the keypad below the Check icon.</p> <p>Cancel deletion by pressing the keypad below the X.</p> <p>Press the Start/Stop keypad to return to the Data Transfer Menu.</p>	

Table 16

## The Non-Active Menu

### Advanced Functions Sub-Menu/Data Transfer Menu/Write Help File from the Data Card to the Machine

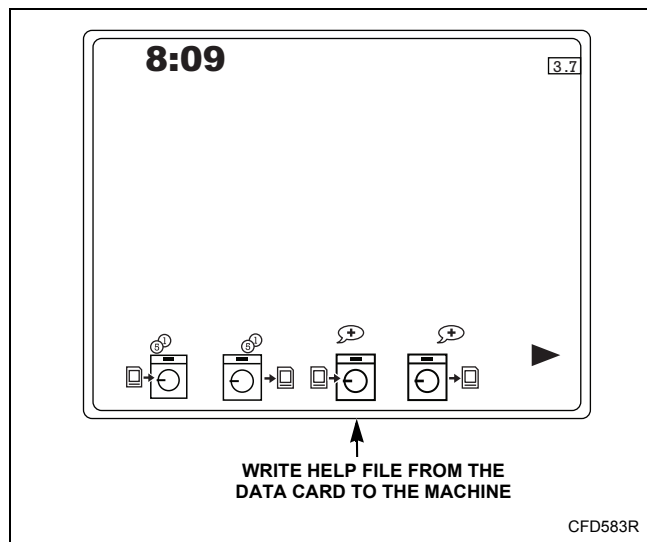


Figure 51

To access the Write Help File, from the Data Card to the machine function, press the keypad below the corresponding icon. Refer to *Figure 51*.

Allows the operator to load Help files from the data card to the machine.

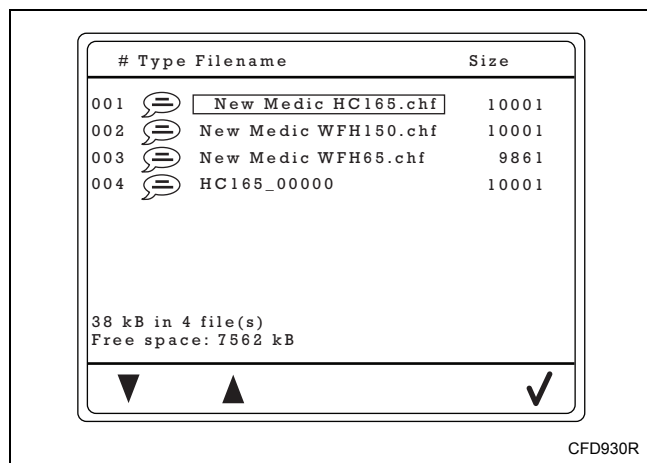


Figure 52

1. Use the keypads below the Navigation icons to select the Help file to write to the machine. Refer to *Figure 52*.
2. Confirm by pressing the keypad below the Check icon. Refer to *Figure 52*.

An hour glass symbol will appear while writing.

3. Press the Start/Stop keypad to return to the Data Transfer Menu.

### Advanced Functions Sub-Menu/Data Transfer Menu/Write Price and Time File from the Data Card to the Machine

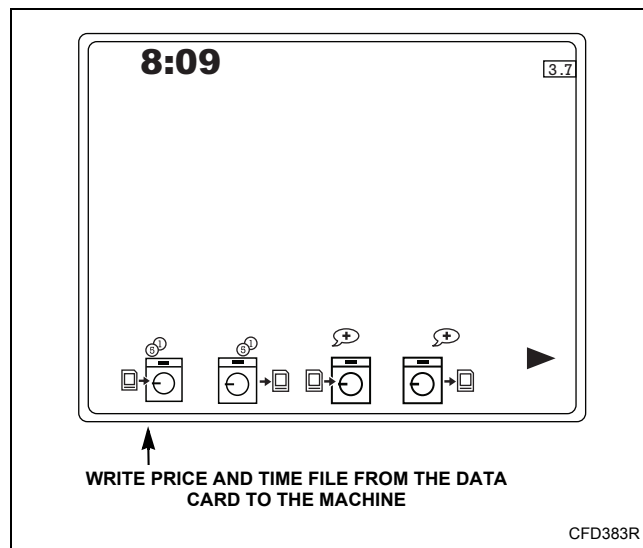


Figure 53

To access the Write Price and Time File, from the Data Card to the Machine function from the Data Transfer Menu, press the keypad below the corresponding icon. Refer to *Figure 53*.

Allows the operator to load price and time files from the data card to the machine.

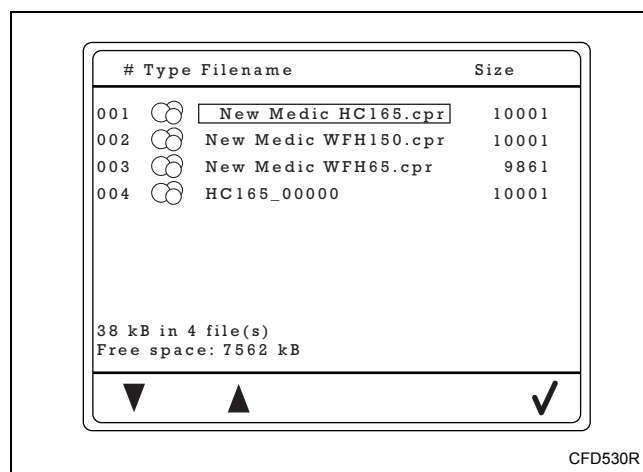


Figure 54

1. Use the keypads below the Navigation icons to select the price and time file to write to the machine. Refer to *Figure 54*.
2. Confirm by pressing the keypad below the Check icon. Refer to *Figure 54*.

An hourglass symbol will appear while writing.

3. Press the Start/Stop keypad to return to the Data Transfer Menu.

**Advanced Functions Sub-Menu/Data Transfer Menu/Write Price and Time File from the Machine to the Data Card**

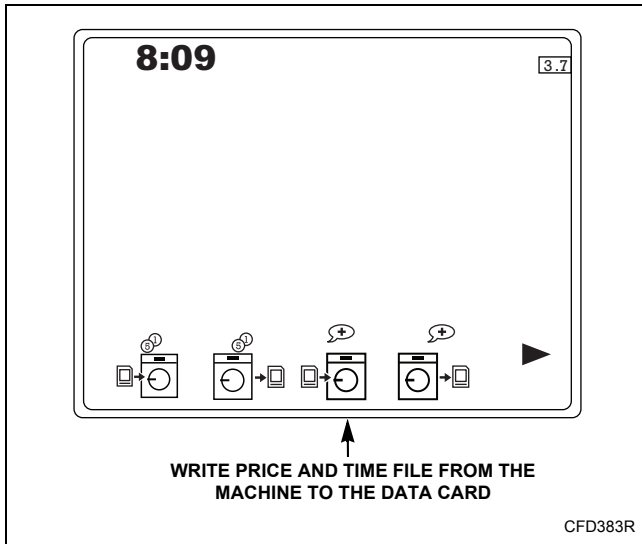


Figure 55

To access the Write Price and Time File, from the Machine to the Data Card function from the Data Transfer Menu, press the keypad below the corresponding icon. *Figure 55.*

Allows the operator to write price and time files from the machine to the data card.

The price and time file is displayed as shown. If necessary, the name of the file can be changed.

1. Move the cursor using the keypads below the Left/Right icons to select a letter or figure or to add a letter or figure. Refer to *Figure 56*.
2. Change the letters and figures with using the keypads below the Up/Down icons. Refer to *Figure 56*.
3. Press the keypad below the Check icon to write the data to the data card. Refer to *Figure 56*.

An hourglass symbol will appear while writing.

4. Press the Start/Stop keypad to return to the Data Transfer Menu.

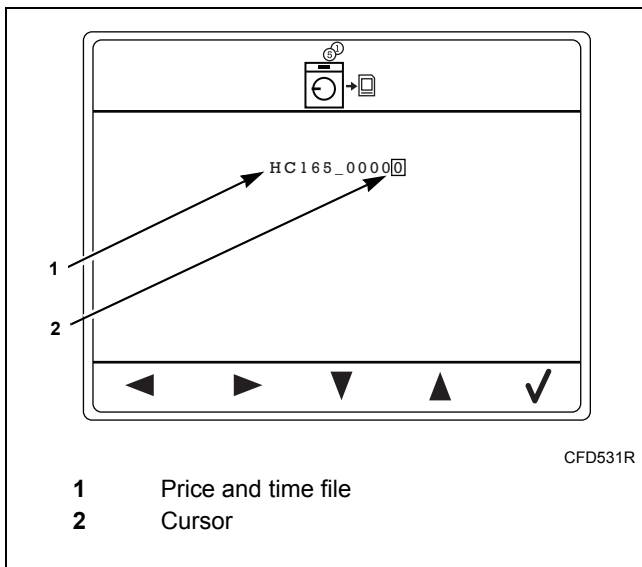


Figure 56

## The Non-Active Menu

### *Advanced Functions Sub-Menu/Data Transfer Menu/Write Help File from the Machine to the Data Card*

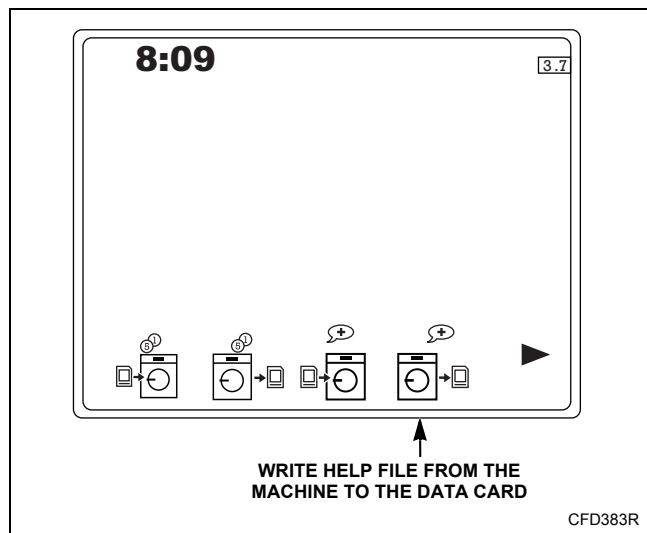


Figure 57

To access the Write Help File from the Machine to the Data Card display, from the Data Transfer Menu, press the keypad below the corresponding icon. Refer to *Figure 57*.

Allows the operator to load Help files from the Data Card to a machine.

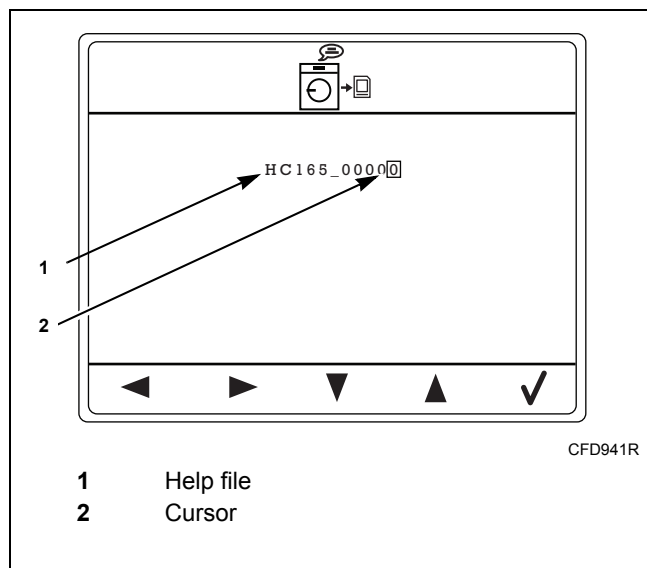


Figure 58

The help file is displayed as shown. If necessary, the name of the file can be changed.

1. Move the cursor using the keypads below the Left/Right icons to select a letter or figure or to add a letter or figure. Refer to *Figure 58*.
2. Change the letters and figures with using the keypads below the Up/Down icons. Refer to *Figure 58*.
3. Press the keypad below the Check icon to write the data to the data card. Refer to *Figure 58*.  
An hourglass symbol will appear while writing
4. Press the Start/Stop keypad to return to the Data Transfer Menu.

*Advanced Functions Sub-Menu/Data Transfer Menu/Write Machine Firmware from a Data Card to the Machine*

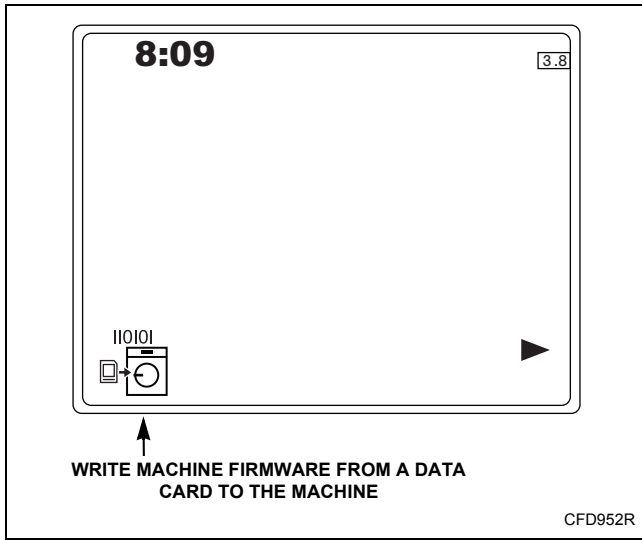


Figure 59

To Write Machine Firmware from a Data Card to the Machine, from the Data Transfer Menu, press the keypad below the corresponding icon. Refer to *Figure 59*.

Allows the operator to load and replace firmware from the data card to the machine.

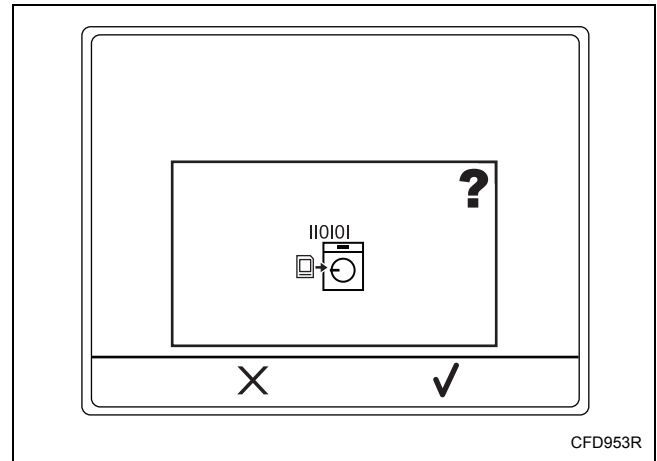


Figure 60

1. Cancel load and replace by pressing the keypad below the X. Refer to *Figure 60*.
2. Confirm by pressing the keypad below the Check icon. Refer to *Figure 60*.
3. Press the Start/Stop keypad to return to the Data Transfer Menu.

3.5 Settings Menu

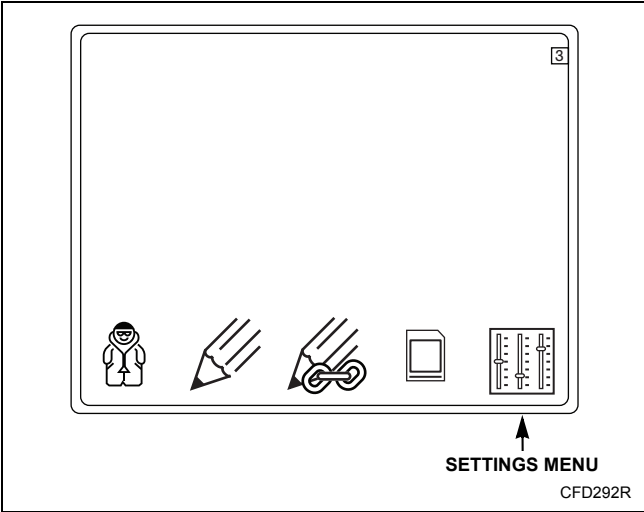


Figure 61

To access the Settings Menu, from the Advanced Functions Sub-Menu, press the keypad below the corresponding icon. Refer to *Figure 61*.

Allows the operator to edit the user settings. Refer to *Figure 62*.

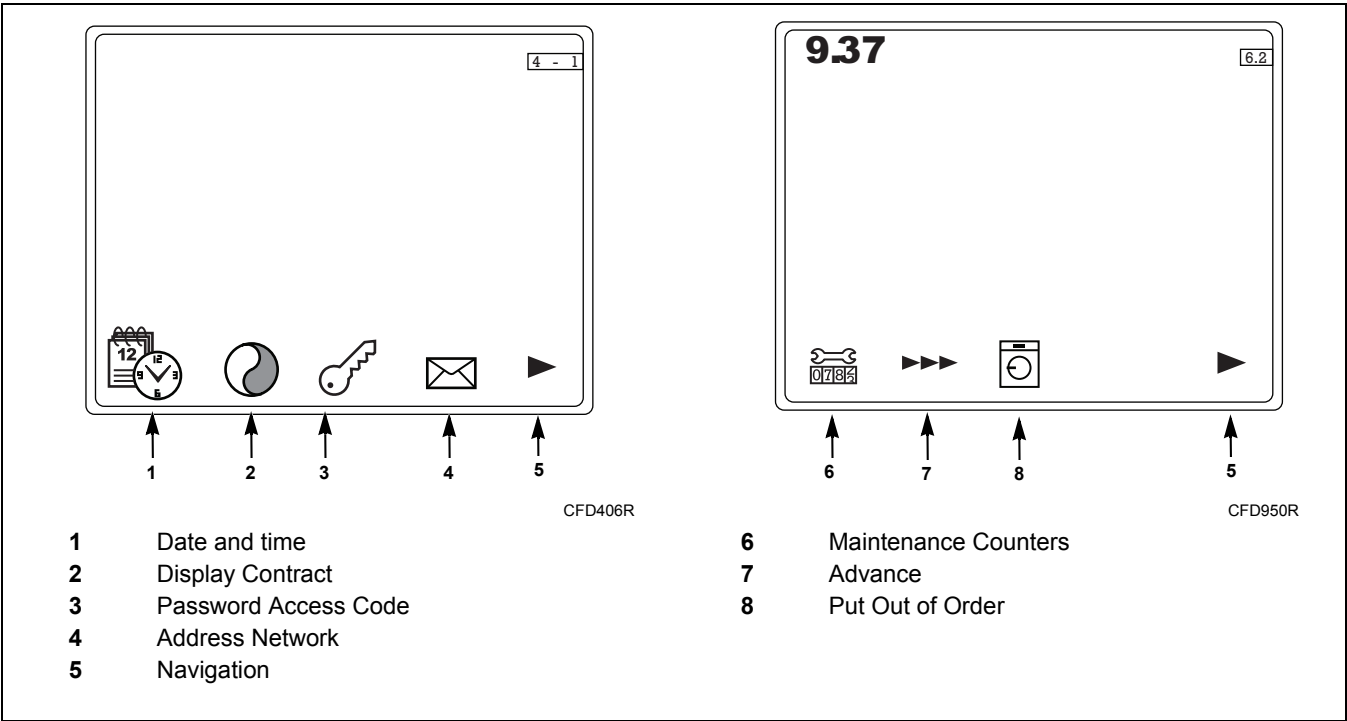


Figure 62

### Advanced Functions Sub-Menu/Settings Menu/Date and Time

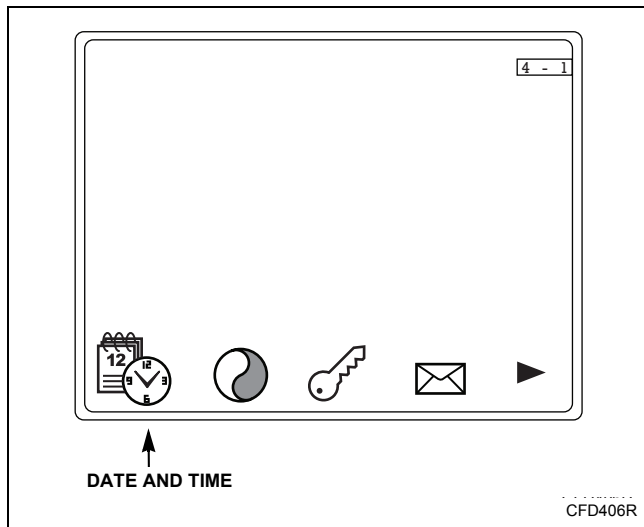


Figure 63

To access the Date and Time function, from the Settings Menu, press the keypad below the corresponding icon. Refer to *Figure 63*.

Allows the operator to set the time, date and day.

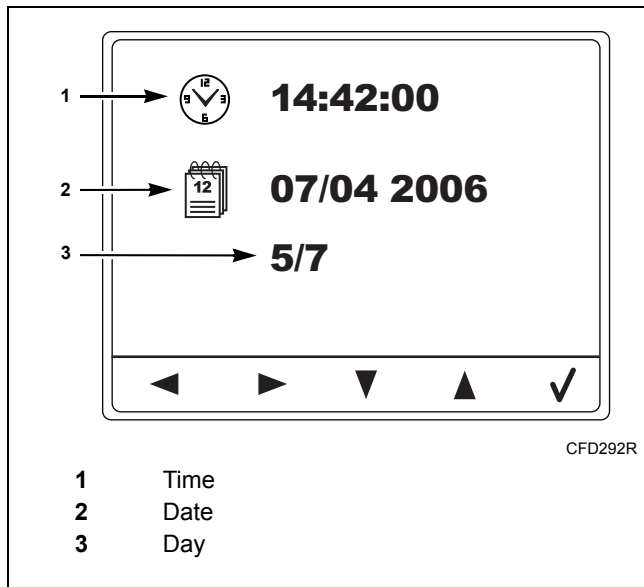


Figure 64

1. Press the keypads below the Left/Right icons to select the time, date or day, and edit these, if necessary.
2. Confirm by pressing the keypad below the Check icon. Refer to *Figure 64*.
3. Press the Start/Stop keypad to return to the Settings Menu.

### Advanced Functions Sub-Menu/Settings Menu/Display Contrast

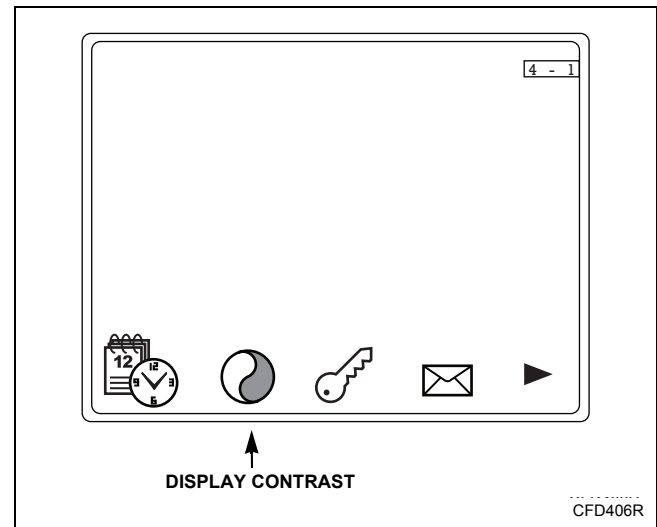


Figure 65

To access the Display Contrast function, from the Settings Menu, press the keypad below the corresponding icon. Refer to *Figure 65*.

Allows the operator to display contrast.

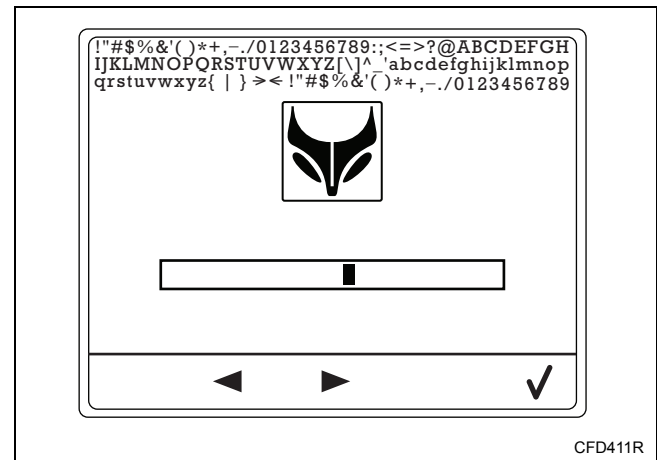


Figure 66

1. Increase or decrease contrast by pressing the keypads below the Navigation icons and confirm by pressing the keypad below the Check icon. Refer to *Figure 66*.
2. Press the Start/Stop keypad to return to the Settings Menu.

## The Non-Active Menu

### Advanced Functions Sub-Menu/Settings Menu/Password/Access Code

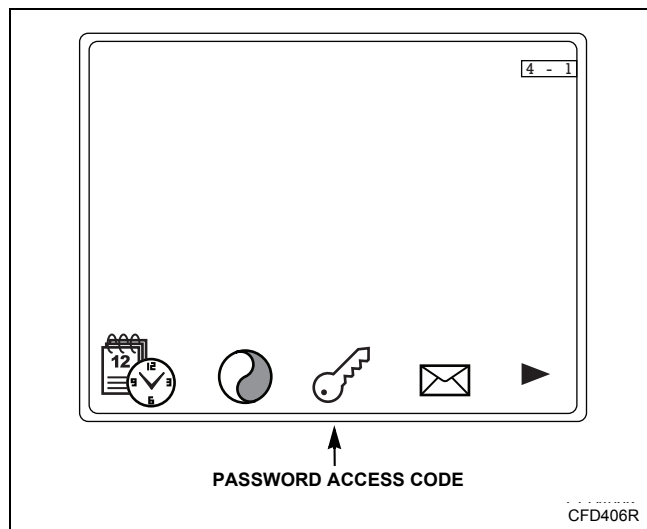


Figure 67

To access the Password/Access Code function, from the Settings Menu, press the keypad below the corresponding icon. Refer to *Figure 67*.

Allows the operator to change the access code.

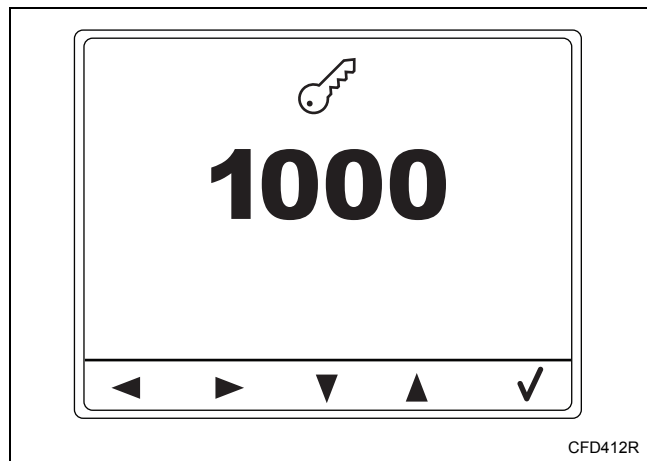


Figure 68

1. Select by pressing the keypads below the Left/Right icons, edit by pressing the keypads below the Up/Down icons, and confirm by pressing the keypad below the Check icon. Refer to *Figure 68*.
2. Press the Start/Stop keypad to return to the Settings Menu.

**NOTE: If the new access code is misplaced or forgotten, the main board will have to be replaced and will not be covered by warranty.**

### Advanced Functions Sub-Menu/Settings Menu/Network Address

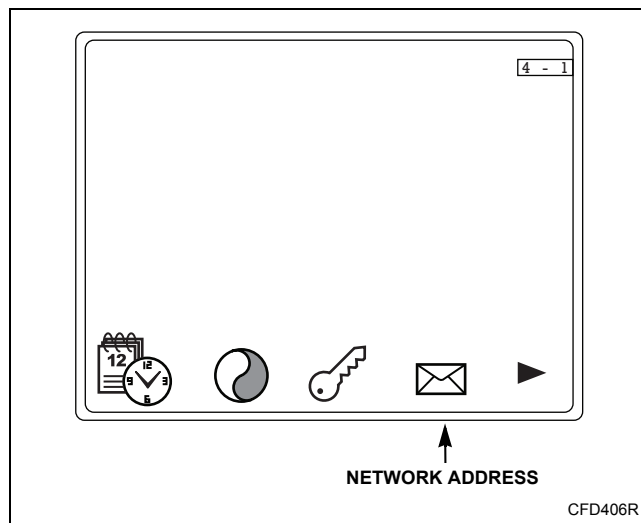


Figure 69

To access the Network Address function, from the Settings Menu, press the keypad below the corresponding icon. Refer to *Figure 69*.

Allows the operator to set the address if the machine is used in a network.

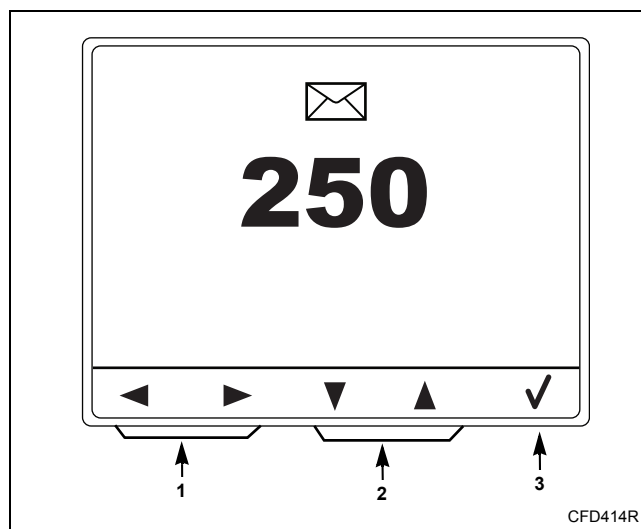


Figure 70

1. Select by pressing the keypads below the Left/Right icons, edit by pressing the keypads below the Up/Down icons, and confirm by pressing the keypad below the Check icon. Refer to *Figure 70*.
2. Press the Start/Stop keypad to return to the Settings Menu.



## Advanced Functions Sub-Menu/Settings Menu/Maintenance Counters

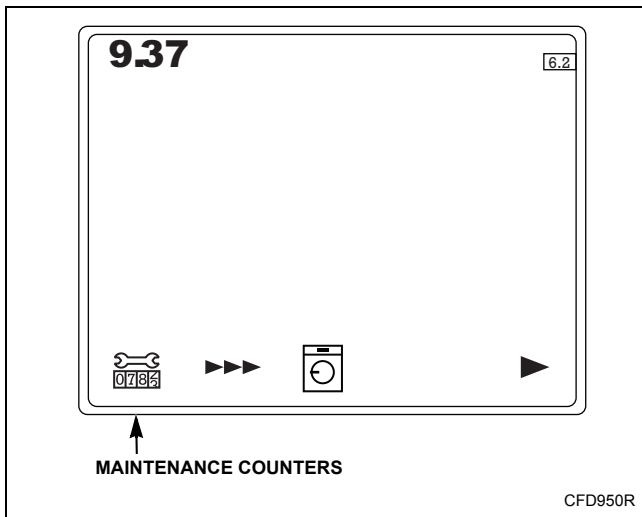


Figure 71

To access the Maintenance Counters function, from the Settings Menu, press the keypad below the corresponding icon. Refer to *Figure 71*.

Allows the operator to set when a maintenance warning will show.

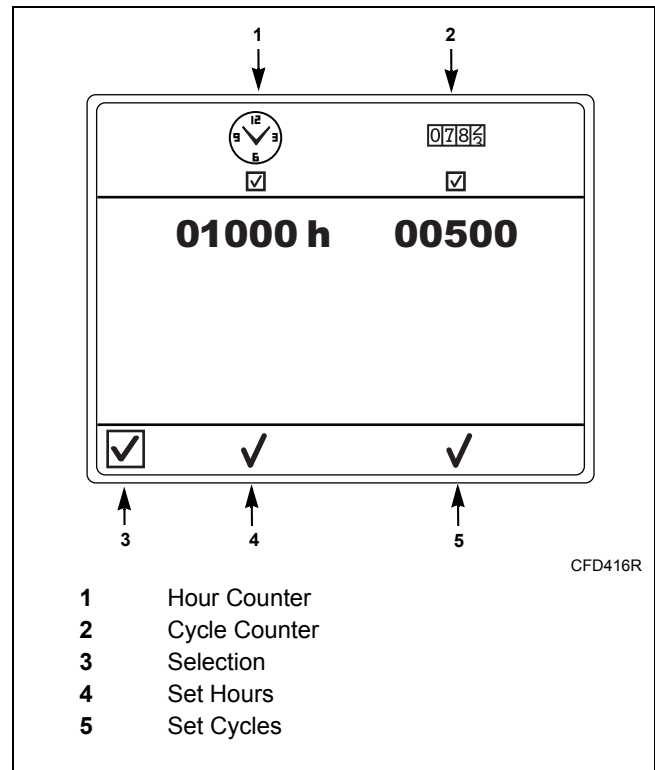


Figure 72

The operator can generate a maintenance warning via an hour counter or cycle counter.

1. Press the keypad below the Selection icon to activate one or both counters. Refer to *Figure 72*.
2. Press the keypad below the Set Hours icon to set the number of hours after which the warning is to be generated. Refer to *Figure 72*.

Press the keypad below the Set Cycles icon to set the number of cycles after which the warning is to be generated. Refer to *Figure 72*.

## The Non-Active Menu

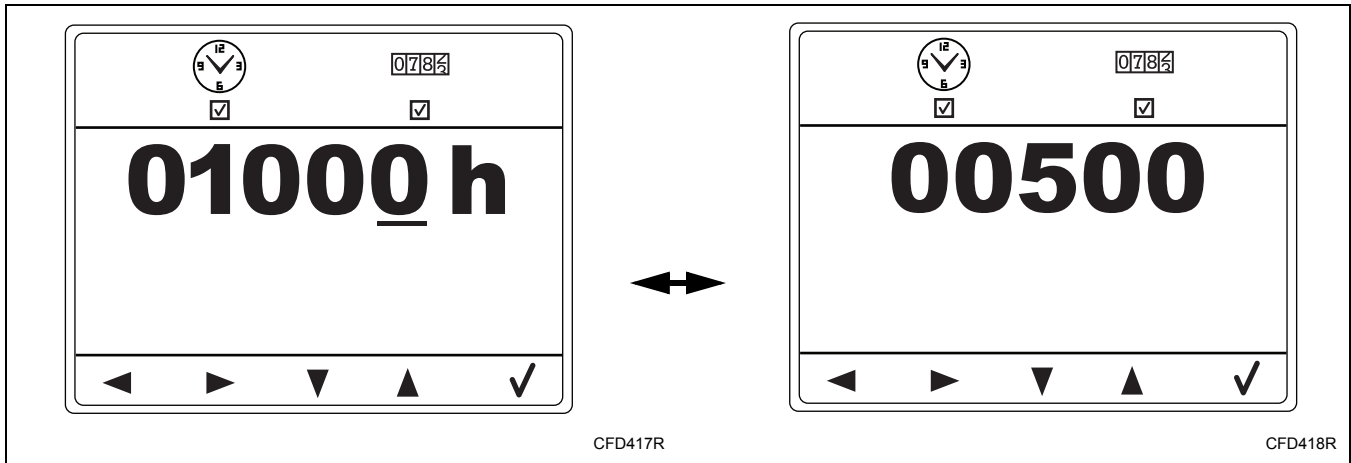


Figure 73

3. Edit the number of hours or cycles by pressing the keypads below the Navigation icons. Refer to *Figure 73*.

**NOTE: Once the number of hours or cycles set is reached, the error message “200” or “201” will display before a cycle starts (see Error Messages).**

4. Confirm by pressing the keypad below the Check icon. Refer to *Figure 73*.
5. Press the Start/Stop keypad to return to the Settings Menu.

*Advanced Functions Sub-Menu/Settings  
Menu/Advance*

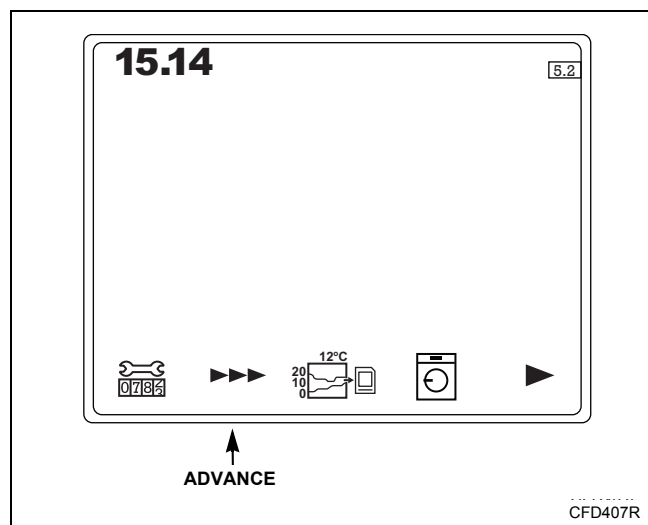


Figure 74

Allows the operator to activate or deactivate the Rapid Advance function by pressing the keypad below the Advance icon.

*Advanced Functions Sub-Menu/Settings  
Menu/Put Out of Order*

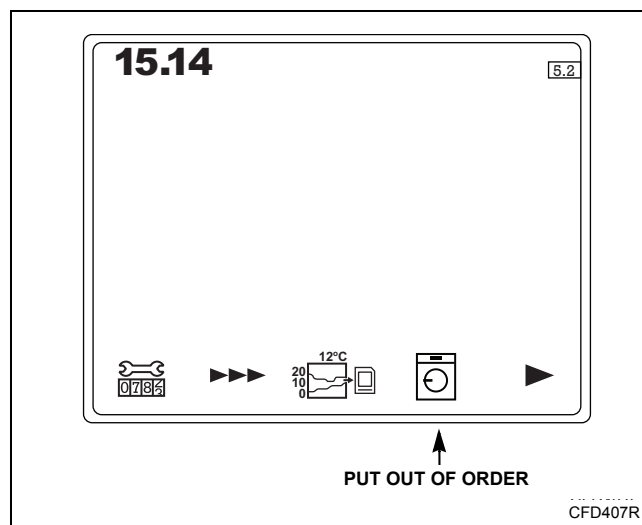


Figure 75

Press the keypad below the Put Out of Order icon to put the machine out of order. Refer to *Figure 75*.



Figure 76

This disables the machine and indicates the Out of Order status on the display.

# Error Messages

Following is a list of possible error messages that may be displayed.

Error Message	Possible Cause/Correction
ERROR 1: PROGRAM TITLE ERROR	Missing program titles on the display board. After the installation of a new display board, titles are missing on this board. There was no copy of the titles from the mainboard to the display board.
ERROR 2: COMPONENT UNKNOWN	A wash component is unknown in the wash program.
ERROR 3: COMPONENT ERROR	Incorrect wash data. A wash component is created with incorrect length.
ERROR 4: SUBROUTINE NOT FOUND	Refers to an unknown component.
ERROR 5: WRONG PASSWORD	An incorrect password is used for entering test menu or editing menu.
ERROR 6: WASH DATA ERROR	Incorrect or incomplete wash data.
ERROR 7: INVERTER COMMUNICATION ERROR	No communication/reaction from the mainboard. Missing communication between inverter and mainboard.
ERROR 8: INVERTER AUTOTUNING ERROR	Incorrect status during autotuning.
ERROR 9: INVERTER PARAMETER ERROR	Writing of parameters is refused. Error during writing parameters to the inverter.
ERROR 10: INVERTER STATUS ERROR	Error message on the inverter. Error message + specific error indication of the freq inverter. <ul style="list-style-type: none"> <li>• OC1: Overcurrent accelerating</li> <li>• OC2: Overcurrent constant speed</li> <li>• OC3: Overcurrent decelerating</li> <li>• OV1: Overvoltage accelerating</li> <li>• OV2: Overvoltage constant speed</li> <li>• OV3: Overvoltage decelerating</li> <li>• PE: EEPROM failure</li> <li>• PUE: Communication error</li> <li>• RET: Retries exceeded</li> <li>• P24: 24V short circuit</li> <li>• E.3: Option fault 3</li> <li>• E.6: CPU error 6</li> <li>• E.7: CPU error 7</li> <li>• THT: Inverter overload</li> <li>• THM: Motor overload</li> <li>• FIN: Heatsink overheat</li> <li>• OLT: Stall prevention</li> <li>• BE: Brake alarm</li> <li>• GF: Ground fault</li> <li>• LF: Output phase failure</li> <li>• OHT: Thermal relay operation</li> <li>• OPT: Option alarm</li> <li>• SA: Safety circuit open</li> </ul>
ERROR 11: REAL TIME CLOCK ERROR	Error by read-out of the memory of the clock (on the mainboard).
ERROR 12: TILT SWITCH ERROR	Incorrect functioning or connection of the tilt switch when you start the washing cycle.

(Continued)

(Continued)

Error Message	Possible Cause/Correction
ERROR 13: PRICE & TIME ERROR	Price & time file missing (see: setup Cygnus Assist - user configuration - time edited).
ERROR 14: TEMPERATURE ERROR	By start-up of the program the temperature is higher than 95°C. After 6 min the temperature is still lower than 6°C or higher than 95°C.
ERROR 15: LEVEL SENSOR ERROR	By the start-up of the program the measured water level is: <ul style="list-style-type: none"> <li>• Lower than 4 cm</li> <li>• Higher than 2 cm (positive offset)</li> <li>• Higher than 10 cm (negative offset)</li> </ul>
ERROR 16: CAN COMMUNICATION ERROR	No communication between the main board and the display board.
ERROR 17: WRONG MACHINE TYPE	Wrong machine type programmed with the wash data.
ERROR 18: WRONG WASH DATA ERROR	Wrong wash data for the corresponding machine.
ERROR 19: ID CHIP READ ERROR	Error by reading the identification chip.
ERROR 20: ID CHIP WRITE ERROR	Error by a writing action to the identification chip.
ERROR 21: MMC TRANSFER ERROR	Error during the transfer of data to MMC card.
ERROR 22: DOORLOCK ERROR	Difficulties to lock the door. 5 unsuccessful tries to lock the door in 10 seconds.
ERROR 23: WASH DATA VERSION ERROR	
ERROR 24: WRONG DISPLAY TYPE ERROR	The wash data are not corresponding with the type of display.
ERROR 25: WASH DATA BACKUP ERROR	
ERROR 26: NEW ID CHIP ERROR	
ERROR 27: INVALID FILE SIZE ERROR	
ERROR 28: RTC READ ERROR	
ERROR 29: RTC WRITE ERROR	
ERROR 30: EEPROM READ ERROR	
ERROR 31: EEPROM WRITE ERROR	
ERROR 32: WATER LEVEL TOO LOW	The water level was too low during the heating cycle (during 150 sec).
ERROR 33: SOFTWARE VERSION ERROR	
ERROR 34: MCU FAILURE ERROR	
ERROR 35: VOLTAGE TOO LOW ERROR	Low voltage during boot-up.
ERROR 36: INVERTER INIT ERROR	The board is unable to initialize the inverter.
ERROR 50: LEVEL STOP ERROR	The programmed water level is not reached in a certain calculated time. The calculated time is the theoretical time multiplied by 10 (with 5 minutes minimum, time only counts when water flows).
ERROR 51: HEAT STOP ERROR	The programmed temperature is not reached in a certain calculated time. The calculated time is the theoretical time multiplied by 10 (with 25 minutes minimum, time only counts when heating is on).
ERROR 52: DRAIN ERROR	Error message when the water level is not lowered with 2 cm after 2 minutes after the end of the cycle. After 8 minutes of the end of the wash program: water level must be "0" (machines with a valve). After 4 minutes of the end of the wash program: water level must be "0" (machines with a pump).
ERROR 53: HEATING ERROR	The programmed temperature is not reached after 20 minutes. Warning after 10 minutes when the calculated temperature is not reached. Theoretical calculation with a tenth of the programmed power.

(Continued)

## Error Messages

(Continued)

Error Message	Possible Cause/Correction
ERROR 54: FILL ERROR	The programmed water level is not reached after 6 minutes. Warning after 3 minutes when the calculated water level is not reached. A theoretical calculation with a fourth of programmed water level.
ERROR 55: ROTATION SENSOR ERROR	When the rotation signal is missing for 30 sec.
ERROR 56: SPIN RETRY ERROR	Programmed number of imbalances is reached.
ERROR 57: EXT ERROR	
ERROR 58: DRY ERROR	
ERROR 59: DOOR OPEN WHILE WASHING ERROR	The door is open or unlocked during the operation of the machine.
ERROR 60: FRAME INBALANCE ERROR ( <u>ONLY</u> for WD machines)	The frame imbalance switch has been triggered.

# Events

With the Cygnus Professional control, the data history is recorded in events:

Event	Description
EVENT 100: PROGRAM STARTED	Indication of the start of the program with the indication of time and date.
EVENT 101: PROGRAM ENDED	Indication of the end of the program with the indication of time and date.
EVENT 102: PROGRAM ABORTED	The program is aborted or stopped.
EVENT 103: LEVEL REACHED	The programmed water level is reached.
EVENT 104: TEMPERATURE REACHED	The programmed temperature is reached.
EVENT 105: HUMIDITY REACHED	The programmed level of humidity is reached.
EVENT 107: SOAP ACTIVATION	
EVENT 108: SMARTWAVE RESULT	The Smartwave wash routine has ended, the result has been added to the history file.
EVENT 109: WEIGHT ENTERED	
EVENT 113: USER HAS ADVANCED	The advance function has been used.
EVENT 114: INVERTER NOT RUNNING	Although the communication with the frequency inverter is good, the motor is not running. This is detected in the status of the inverter. This can be a result of a short voltage drop on the mains (<0.5 sec). The control will reset the inverter and finish the wash cycle.
EVENT 115: PROGRAM INTERRUPTED	User interrupted the cycle.
EVENT 116: AUDIT INFO	
EVENT 150: FIRST EVENT / WASH DATA EDITED	Wash data have been modified on the machine.
EVENT 151: WASH DATA DOWNLOADED	Wash data have been modified by downloading of wash data from a laptop.
EVENT 152: WASH DATA FROM MMC	Wash data have been modified by using the data card. The data card is programmed by the MMC programming tool.
EVENT 153: FIRMWARE FROM MMC	Update of firmware with the data card.
EVENT 154: PRICES EDITED	
EVENT 155: PRICES DOWNLOADED	
EVENT 156: PRICES FROM MMC	
EVENT 157: HELP FILE DOWNLOADED	
EVENT 158: HELP FILE FROM MMC	
EVENT 159: POWER UP	
EVENT 160: POWER UP WASHING	
EVENT 161: NEW ID CHIP	
EVENT 162: ID DATA ENTERED	
EVENT 163: NEW MAINBOARD	
EVENT 164: NEW DISPLAY BOARD	
EVENT 165: BACKUP WASH DATA	
EVENT 166: RESTORE WASH DATA	
EVENT 167: COPY DISPLAY FIRMWARE	
EVENT 168: COPY MAINBOARD FIRMWARE	
EVENT 169: RESTORE DISPLAY FIRMWARE	
EVENT 170: RESTORE MAINBOARD FIRMWARE	
EVENT 171: NEW BOOT	
EVENT 172: COPY BOOT	
EVENT 173: COPY PRICES	
EVENT 174: RESTORE PRICES	

(Continued)

## Events

(Continued)

Event	Description
EVENT 175: POWER FAILURE	
EVENT 176: POWER RESTORED	
EVENT 177: BURN IN TEST STARTED	
EVENT 178: CODE RESET	
EVENT 179: SET TIME & DATE	
EVENT 200: WARNING: MAX. OPERATING HOURS REACHED	
EVENT 201: WARNING: MAX. OPERATING CYCLES REACHED	
EVENT 202: ERRORS OCCURRED	



# Rapid Advance Feature

The Rapid Advance feature allows the owner to manually advance through active cycles.

## How to Use Rapid Advance

Control must be in an active cycle to use the Rapid Advance feature.

While a cycle is in process, pressing the keypad below the ► icon will advance the washer-extractor to the next cycle step. The Cycle Step Bar will indicate which cycle step the washer-extractor is in. Refer to *Figure 2*.

For example, if the washer-extractor is in the first fill cycle step, pressing the keypad below the ► icon will advance the washer into the agitate cycle step.

While a cycle is in process, pressing the keypad below the ►► icon will advance the washer-extractor to the next cycle phase. The Cycle Phase Bar will indicate which cycle phase the washer-extractor is in. Refer to *Figure 2*.

For example if the washer-extractor is in a wash cycle phase, pressing the keypad below the ►► icon will advance the washer-extractor into the cycle phase.

The Rapid Advance Feature cannot advance past a spin or drain phase.

**NOTE: The Rapid Advance feature must be turned on for Rapid Advance to work. Refer to the Advance function in the Advanced Functions Sub-Menu/Settings Menu section.**

# Communication Mode

## Infra-red Communications

The Infra-red Communication feature allows the control to communicate with a PC via the Cygnus Assist Software. The control can be programmed and have its data read without using the keypad.



