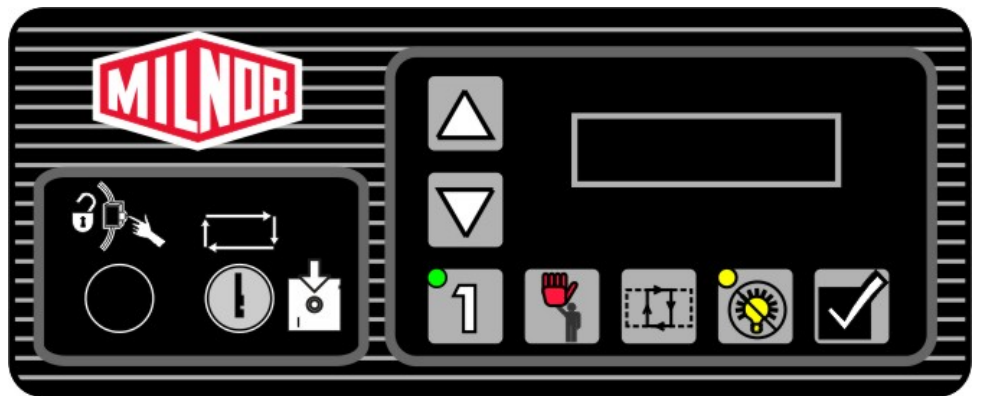
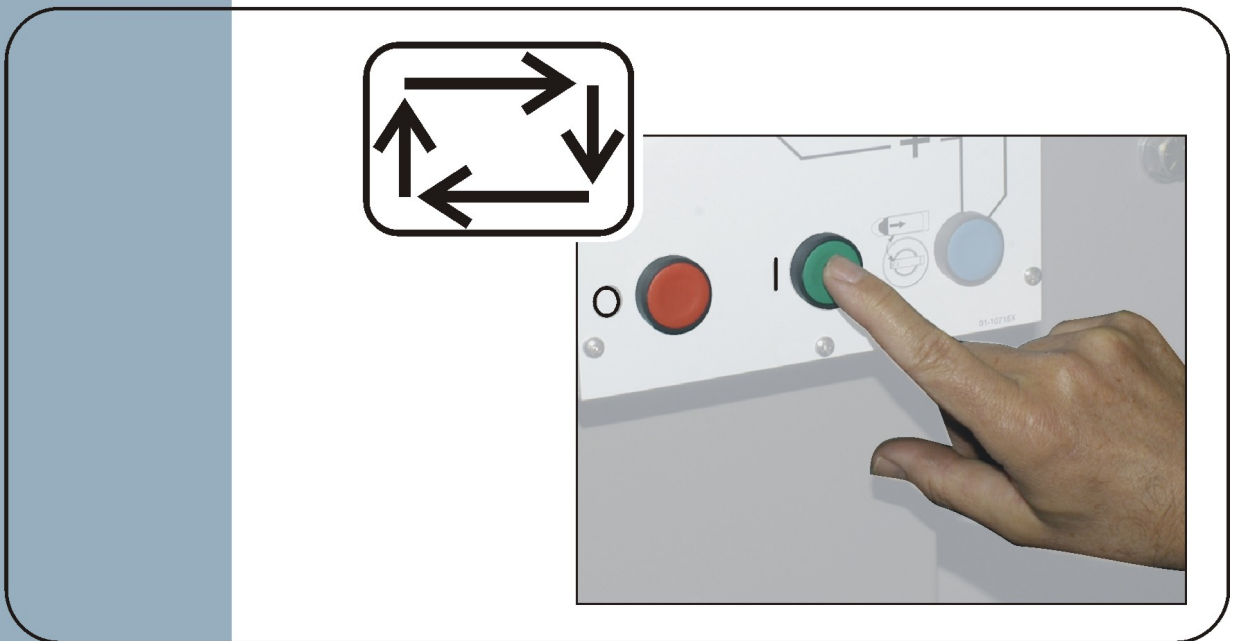


Published Manual Number/ECN: MQCJVO01UU/2012413A

- Publishing System: TPAS
- Access date: 10/19/2012
- Document ECN's: Latest Available



## E-P Plus®, E-P Express®





## Table of Contents for MQCJVO01UU/2012413A

Page	Description	Document/ECN
<b>1</b>	<b>Section 1: English</b>	
3	Operator Guide—Washer-extractor Models with E-P Plus® and E-P Express® Controls	MQCJVO01EN/20090831
<b>15</b>	<b>Section 2: Deutsch</b>	
17	Betriebshandbuch—Wasch-Schleudermaschinen der Modelle mit den E-P Plus® und E-P Express® Steuerelementen	MQCJVO01DE/20090831
<b>37</b>	<b>Section 3: Español</b>	
39	Guía del operario—Modelos de Lavadoras-Extractoras con controles E-P Plus® y E-P Express®	MQCJVO01ES/20090831
<b>59</b>	<b>Section 4: Français</b>	
61	Guide de l'opérateur—Modèles de laveuse-essoreuseavec commandes E-P Plus® et E-P Express®	MQCJVO01FR/20090831
<b>81</b>	<b>Section 5: Nederlands</b>	
83	Gebruikershandleiding—Was-/extractiemachinemodellen met E-P Plus® en E-P Express® bedieningselementen	MQCJVO01NL/20090831
<b>103</b>	<b>Section 6: Polski</b>	
105	Instrukcja Użytkownika—Washer-extractor Models with E-P Plus® and E-P Express® Controls	MQCJVO01PL/20090831
<b>125</b>	<b>Section 7: português</b>	
127	Guia do operador—Modelos de extração de limpeza com controles E-P Plus® e E-P Express®	MQCJVO01PT/20090831
<b>147</b>	<b>Section 8: Türkçe</b>	
149	Kullan c rehberi—E-P Plus® ve E-P Express® kontrollü y kama-s kma makinesi modelleri	MQCJVO01TR/20090831



**Section**  
**English**

**1**



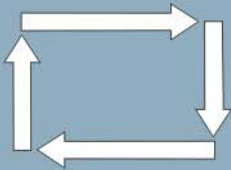


Published Manual Number: MQCJVO01EN

- Specified Date: 20090831
- As-of Date: 20090831
- Access Date: 20091001
- Depth: Detail
- Custom: n/a
- Applicability: CJV CJH CJF CJX
- Language Code: ENG01, Purpose: publication, Format: 1colA

# Operator Guide—

# Washer-extractor Models with E-P Plus® and E-P Express® Controls



**Read the  
separate  
safety  
manual  
before  
installing,  
operating,  
or servicing**

**Applicable Milnor® products by model number:**

30015T5X	30015V7J	30022H8J	30022T5X	30022V6J	30022VRJ	30022X8J
36021V5J	36021V7J	36026V5J	36026V7J	36026X8J	42026V6J	42026X7J
42030V6J	42032X7J	48040F7B	48040F7J	MWR12J5	MWR12X5	MWR16J5
MWR16X5	MWR18J4	MWR18J6	MWR18X4			



# Table of Contents

Sections	Figures, Tables, and Supplements
<b>Chapter 1. Description of Controls</b>	
<b>1.1. Operator Controls on E-P Plus® and E-P Express® Models</b> (Document BICJHF01)	Figure 1: Typical Control Panel
<b>Chapter 2. Normal Operation</b>	
<b>2.1. Normal Machine Operation</b> (Document BICJVO03)	
2.1.1. Start Here for Safety	
2.1.2. Check Switch Settings	Supplement 1: The Power-up Safety Delay
2.1.3. Load the Machine	
2.1.4. Select and Start a Formula	
2.1.5. Monitor Operation	
2.1.6. How to Terminate a Running Formula	
2.1.7. How to Restart after Losing Power	
2.1.8. Unload the Machine	
<b>Chapter 3. Correcting Errors</b>	
<b>3.1. Error Messages During Normal Operation</b> (Document BICJHT04)	

# Chapter 1

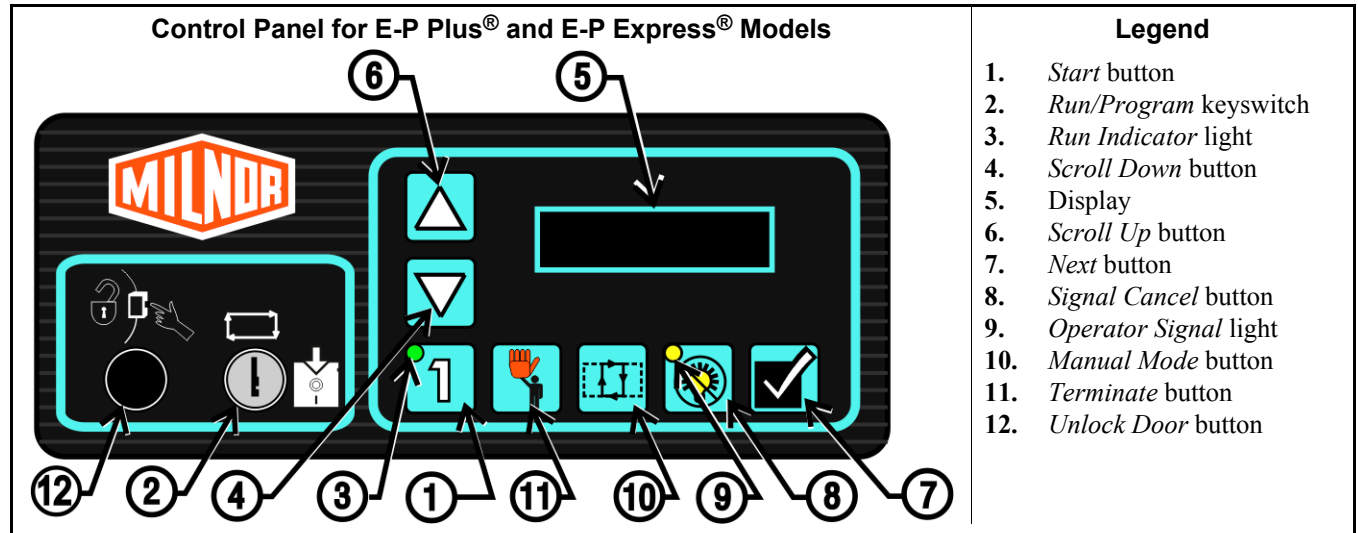
## Description of Controls

BICJHF01 (Published) Book specs- Dates: 20090831 / 20090831 / 20091105 Lang: ENG01 Applic: CJV CJH CJF CJX

### **1.1. Operator Controls on E-P Plus® and E-P Express® Models**

This document describes the user controls during normal machine operation. For additional information on other controls shown in [Figure 1](#), see the reference manual.

Figure 1: Typical Control Panel



- Legend**
1. Start button
  2. Run/Program keyswitch
  3. Run Indicator light
  4. Scroll Down button
  5. Display
  6. Scroll Up button
  7. Next button
  8. Signal Cancel button
  9. Operator Signal light
  10. Manual Mode button
  11. Terminate button
  12. Unlock Door button

**Display or Action**

**Explanation**

- ① When the display says *Run Formula*, press this button to start the formula.
- ☐ / ☑ During normal operation, the *Run/Program* keyswitch must be set to ☐. This is the automatic position.
- ▲ / ▼ Use the *Scroll Up* and *Scroll Down* buttons to select the desired formula.
- ☑ The *Next* button is not used during normal operation.
- 🔊 The *Signal Cancel* button silences the operator signal that sounds when a formula completes normally. Also, if an operator signal is programmed with a chemical injection, add the chemical and press this button to resume operation.
- 🛑 The *Manual* button is not used during normal operation.
- 🛑 The *Terminate* button cancels all remaining steps in the current formula and starts the shutdown procedure for the machine. The formula can not be resumed.
- 🔓 The *Unlock Door* button allows you to open the door if all other safety conditions are met.

— End of BICJHF01 —

# Chapter 2

## Normal Operation

BICJVO03 (Published) Book specs- Dates: 20090831 / 20090831 / 20091105 Lang: ENG01 Applic: CJV CJH CJF CJX

### 2.1. Normal Machine Operation

#### 2.1.1. Start Here for Safety

This document is designed to remind the person operating this washer-extractor what is required to operate this machine. Do not attempt to operate this machine before a trained operator has explained the details to you.








**DANGER [1]: Multiple Hazards**—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.

**CAUTION [2]: Electrocutation and Electrical Burn Hazards**—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Do not unlock or open electric box doors.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.

#### 2.1.2. Check Switch Settings

Display or Action	Explanation
	Check that the <i>run/program</i> keyswitch is at  .
	Check that any <i>emergency stop</i> switches are in the <i>out</i> position.
	Check that the master switch, if provided, is at  .

#### Supplement 1

#### The Power-up Safety Delay

Some Milnor® washer extractors do not use a speed sensing device to verify that the basket has stopped rotating. Therefore, when power is first applied to the machine, at least 80 seconds must elapse before any further operations can be attempted. This provides sufficient time for the basket to coast to a complete stop if power was lost while the machine was in a high speed extract and restored before the basket stopped.

### 2.1.3. Load the Machine

Load the machine to the rated capacity and securely close the loading door.

### 2.1.4. Select and Start a Formula

**Display or Action**

```
RUN FORMULA
00 OK TO POWER OFF
```

**Explanation**

This is the *Run Formula* display. From this display, you can disconnect power from the machine without risking damage to electronic parts, or you can select a formula to run.



indexes forward/backward through the 30 formulas.

```
RUN FORMULA
07 FORMULA NUMBER 07
```

Example display: *Formula 07* selected for running



starts the machine with the selected formula.

```
RUN FORMULA
DOES NOT EXIST
```

indicates that the formula selected for running has not been programmed. This display appears for three seconds.

### 2.1.5. Monitor Operation

**Display or Action**

```
23:04 F02S01 02:37
TEMP A168/D170 LEV 1
```

```
23:04 STEP 01 02:37
TEMP A168/D170 SPD 0
```

```
23:04 F02S01 02:37
```

```
TEMP A168/D170 LEV 1
```

```
SPD 0 LEV 2
```

**Explanation**

These two displays alternate during normal operation on some E-P Plus® models. E-P Express® models display other data about the step, but not bath temperature data.

STEP01 is the current step.

EXTRACT indicates that the machine is extracting the goods.

TIMEHALT indicates that the timer is stopped for a chemical injection. The chemical supply equipment must be properly installed for this feature to work.

Temperature in this E-P Plus® machine is measured in degrees Fahrenheit or Celsius, according to machine configuration.

A168 indicates that the current achieved temperature is 168 degrees. Temperature is displayed only if machine is equipped with and configured for temperature control.

D170 indicates that the desired temperature for this step is 170 degrees. Temperature is displayed only if the machine is equipped with and configured for temperature control.

LEV 2 indicates that the bath level achieved is Level 2.

SPD 0 indicates the bath speed for this step.

WAIT FOR LEVEL 2 H indicates that Level 2 is programmed for this step, but is not yet achieved. The H indicates that the hot water valve is open; C indicates cold water, and 3 indicates extra water.

CHEM 03 is displayed when Chemical 03 is being injected. The number for each chemical (up to five may be connected) is displayed as the chemical is injected.

FINAL EXTRACT indicates that the step in progress is the final step of the wash formula.

### 2.1.6. How to Terminate a Running Formula

**Display or Action**



**Explanation**

Cancels the current formula and returns the machine to the *Run Formula* display (see [Section 2.1.4 “Select and Start a Formula”](#)).

### 2.1.7. How to Restart after Losing Power

The control remembers the formula and step it was executing if power fails or if the wall disconnect is turned off while the machine is operating in automatic mode.

#### Display or Action

```
PRESS START TO RUN
STEP xx - FORMULA yy
```

#### Explanation

On most machine models, this display appears when power is restored. The formula and step which were in progress when power was interrupted are shown.

1

Resumes the formula at the displayed formula and step. If the outage occurred in a bath step, level and temperature (if commanded) must again be satisfied, even if these were already satisfied before power was lost. Any commanded chemicals will be injected again.

If the outage occurred during the drain part of a bath step, the bath step will be repeated, then followed by the next commanded step.

If the outage occurred during an extract step, the previous bath will be repeated before the extract step begins.

### 2.1.8. Unload the Machine



**DANGER 3: Entangle and Sever Hazards**—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember you. The goods are normally isolated by the locked cylinder door.

- Do not touch goods inside or hanging partially outside the turning cylinder.

When the formula ends or is terminated, the cylinder coasts for 25 seconds if the last step was a bath step. If the last step was an extract, the coast time may be as much as 180 seconds. Do not attempt to open the door early.

#### Display or Action

```
UNLOCKING THE DOOR
PLEASE WAIT
```

#### Explanation

display during the last 15 seconds of coast, or during the entire coast time if the formula was manually terminated.

```
WAITING TO UNLOAD
```

At the end of the coast time, the operator alarm sounds.

2

Silences the operator alarm. The door unlocks so you can unload the machine.

— End of BICJVO03 —

# Chapter 3

# Correcting Errors



### 3.1. Error Messages During Normal Operation

If an error message appears on the bottom line of the display while the machine is running, the timer shown on the top line will stop counting. When the error is corrected, the timer resumes counting down. To troubleshoot most errors, suspend the formula in progress and turn power off. Do not terminate the formula if it is to be resumed after the error is corrected. See the reference manual for more information.

#### Display or Action

LEVELS STILL MADE

#### Explanation

The microprocessor is still receiving information that a level is made just before or during an extract step, or immediately before the fill for a bath step. This error is self-clearing when level is lost.

TOO LONG TO FILL

Time to fill to level exceeded 10 minutes. Check the water valves, strainers, supply lines, and water pressure. The machine will continue to fill until level is reached, at which time the error will automatically clear and normal operation will resume.

TOO LONG TO STEAM

**E-P Plus models only.** The configured maximum time to steam up to the desired temperature has been exceeded. Check the steam valve, strainer, main steam header and pressure, etc. Steaming will continue until temperature is achieved, when the error will automatically clear and normal operation will resume.

TOO LONG TO COOL

**E-P Plus models only.** The configured maximum time to cool down to the desired temperature has been exceeded. Check the cooldown valve and strainer if equipped, cold water pressure, and position of vernier valve on cooldown inlet. Cooldown will continue until the desired temperature is achieved, when the error will automatically clear.

TOO LONG TO DRAIN

The machine did not drain properly in the allotted drain time. This self-correcting error will clear when the water level in the basket is low enough to begin the next operation.

CHECK PROBE

**E-P Plus models only.** This error message indicates that the resistance of the temperature probe is outside the specified range. Test the probe by disconnecting the probe leads from the processor board and checking the resistance with an accurate digital ohmmeter. Resistance between the two leads must be between 2K and 35K Ohms. Resistance between each lead and ground must be infinite.

EXTERNAL FAULT

On most machines, this error indicates that the programmed chemical injection failed, usually because the chemical supply system is empty. When chemicals are added and can be injected, this error clears automatically, allowing operation to resume.

On 48040F7J/F7B models, this error indicates that the bearing air pressure is below the minimum required to help protect the bearing from water contamination.

**Display or Action**

BRAKE PRESS. FAULT

**Explanation**

This error appears only on machine models equipped with a cylinder brake. The message indicates that the brake is engaged when it should be disengaged. This is usually because the machine is not receiving sufficient air pressure to open the normally-closed brake. Check the plant compressed air supply.

THREE WIRE DISABLED

The three-wire relay de-energized. This relay provides control circuit power to the machine. Once energized by momentarily depressing the *Start* button ( $\square$ ), it is held energized by its own normally open contacts, along with motor overloads, door interlocks, etc. Should any of these contacts open even momentarily, the machine stops and this display appears. This error can only be cleared by depressing the *Start* button ( $\square$ ), and only then if the error has been cleared.

INVERTER FAULT

This error message appears if the microprocessor does not receive an input from the inverter within 14 seconds of the beginning of the formula. After 14 seconds without an inverter input, the timer stops, the basket is stationary, and the drain valve opens. To recover, press the *Next* key ( $\square$ ).

VIBRATION SW TRIPPED  
RECOVERY SEQUENCE

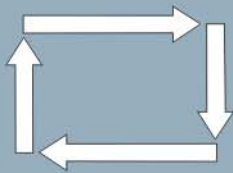
When the vibration switch closes, the timer stops. After 45 to 85 seconds (120 seconds on 42032F7J models), the basket reverses at wash speed as the cylinder fills with water. When low level is achieved, the cylinder reverses for one additional minute at wash speed, then accelerates to extract speed.

— End of BICJHT04 —

**Section**  
**Deutsch**

**2**





Published Manual Number: MQCJVO01DE

- Specified Date: 20090831
- As-of Date: 20090831
- Access Date: 20100607
- Depth: Detail
- Custom: n/a
- Applicability: CJV CJH CJF CJX
- Language Code: GER01, Purpose: publication, Format: 2colA

## Betriebshandbuch [Operator Guide]—

# Wasch-Schleudermaschinen der Modelle mit den E-P Plus<sup>®</sup> und E-P Express<sup>®</sup> Steuerelementen [Washer-extractor Models with E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Controls]

**ACHTUNG:** Die in diesem Handbuch enthaltenen Informationen werden von Pellerin Milnor Corporation ausschließlich als **nur englische version** bereitgestellt. Milnor hat sich um eine qualitativ hochwertige Übersetzung bemüht, macht aber keine Aussagen, Versprechen oder Garantien bezüglich der Genauigkeit, Vollständigkeit oder Richtigkeit der Informationen in der nichtenglischen Version.

Milnor hat darüber hinaus keinen Versuch unternommen, die in der nichtenglischen Version enthaltenen Informationen zu prüfen, da diese vollständig durch Dritte erstellt wurde. Milnor ist daher ausdrücklich nicht für inhaltliche oder formale Fehler haftbar und trägt keine Verantwortung für das Vertrauen auf, oder die Folgen der Verwendung von, Informationen in der nichtenglischen Version.

**Milnor oder seine Vertreter oder Mitarbeiter sind in keinem Fall für jegliche direkten, indirekten, Begleit-, Folge- oder Strafe einschließenden Schäden haftbar, die auf irgend eine Art aus der Verwendung oder einer nicht möglichen Verwendung der nichtenglischen Version oder dem Vertrauen auf die nichtenglische Version dieses Handbuchs herrühren könnten, oder die aus Fehlern, Auslassungen oder Übersetzungsfehlern herrühren.**

Lesen Sie das Sicherheitshandbuch

**Anwendbare Milnor® Maschinen der Modelle: [Applicable Milnor® products by model number:]**

30015T5X	30015V7J	30022H8J	30022T5X	30022V6J	30022VRJ	30022X8J
36021V5J	36021V7J	36026V5J	36026V7J	36026X8J	42026V6J	42026X7J
42030V6J	42032X7J	48040F7B	48040F7J	MWR12J5	MWR12X5	MWR16J5
MWR16X5	MWR18J4	MWR18J6	MWR18X4			

# Inhaltsverzeichnis [English table of contents follows]

Abschnitte	Abbildungen, Tabellen und Ergänzungen
<b>Kapitel 1. Beschreibung der Steuerelemente</b>	
<b>1.1. Steuerelemente an E-P Plus® und E-P Express® (Dokument BICJHF01)</b>	Abbildung 1: Bedienfeld
<b>Kapitel 2. Normaler Maschinenbetrieb</b>	
<b>2.1. Normaler Maschinenbetrieb (Dokument BICJVO03)</b>	
2.1.1. Beginnen Sie hier, bezüglich der Sicherheit	
2.1.2. Überprüfen Sie die Schalterstellungen	Ergänzung 1: Die Zeitverzögerung nach dem Einschalten
2.1.3. Beladen der Maschine	
2.1.4. Auswählen und Starten eines Programms	
2.1.5. Anzeigen auf dem Display	
2.1.6. Ein laufendes Programm abbrechen	
2.1.7. Neustart nach einem Stromausfall	
2.1.8. Maschine Entladen	
<b>Kapitel 3. Fehlerbeseitigung</b>	
<b>3.1. Fehlermeldung während eines laufenden Programms (Dokument BICJHT04)</b>	

# Table of Contents

Sections	Figures, Tables, and Supplements
<b>Chapter 1. Description of Controls</b>	
<b>1.1. Operator Controls on E-P Plus® and E-P Express® Models</b> (Document BICJHF01)	Figure 1: Typical Control Panel
<b>Chapter 2. Normal Operation</b>	
<b>2.1. Normal Machine Operation</b> (Document BICJVO03)	
2.1.1. Start Here for Safety	
2.1.2. Check Switch Settings	Supplement 1: The Power-up Safety Delay
2.1.3. Load the Machine	
2.1.4. Select and Start a Formula	
2.1.5. Monitor Operation	
2.1.6. How to Terminate a Running Formula	
2.1.7. How to Restart after Losing Power	
2.1.8. Unload the Machine	
<b>Chapter 3. Correcting Errors</b>	
<b>3.1. Error Messages During Normal Operation</b> (Document BICJHT04)	



# Kapitel 1

## Beschreibung der Steuerelemente

# Chapter 1

## Description of Controls

BICJHF01 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: GER01 Applic: CJV CJH CJF CJX

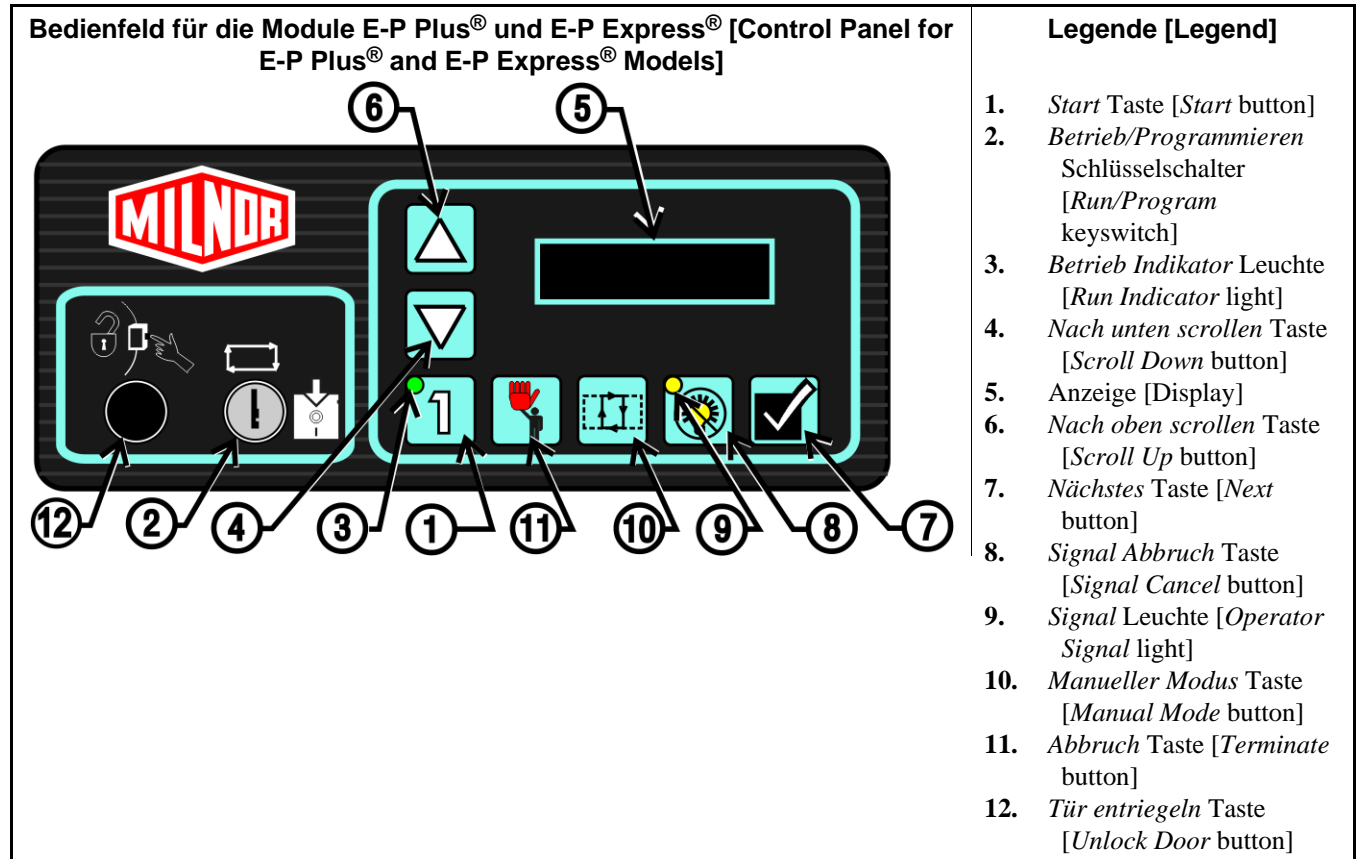
### 1.1. **Steuerelemente an E-P Plus<sup>®</sup> und E-P Express<sup>®</sup>**

Diese Anleitung beschreibt die Steuerelemente für den normalen Maschinenbetrieb. Um zusätzliche Informationen über die in [Abbildung 1](#) beschriebenen Steuerelemente zu erhalten, lesen sie bitte das Technische Handbuch.

### **Operator Controls on E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Models**

This document describes the user controls during normal machine operation. For additional information on other controls shown in [Figure 1](#), see the reference manual.

Abbildung [Figure] 1: Bedienfeld [Typical Control Panel]



**Anzeige oder Aktion**  
[Display or Action]

**Erklärung**

**Explanation**

<p>1</p>	<p>Wenn auf dem Display <i>Run Programm Starten</i> erscheint, drücken sie diese Taste um das Programm zu starten</p>	<p>When the display says <i>Run Formula</i>, press this button to start the formula.</p>
<p>☐ / ☒</p>	<p>Bei normalem Maschinenbetrieb muss der <i>Betrieb/Programmieren</i> Schlüsselschalter auf ☐ gestellt sein. Das ist die <i>Betrieb-Stellung</i>.</p>	<p>During normal operation, the <i>Run/Program</i> keyswitch must be set to ☐. This is the automatic position.</p>
<p>▲ / ▼</p>	<p>Benutzen sie <i>Nach oben scrollen</i> und <i>Nach unten scrollen</i> um ein Programm auszuwählen.</p>	<p>Use the <i>Scroll Up</i> and <i>Scroll Down</i> buttons to select the desired formula.</p>
<p>☑</p>	<p>Die <i>Nächstes</i> Taste wird nicht während eines laufenden Programms benutzt.</p>	<p>The <i>Next</i> button is not used during normal operation.</p>

**Anzeige oder Aktion**  
[Display or Action]

**Erklärung**

**Explanation**



Das Signal das nach Ablaufen eines Programms ertönt wird mit der *Signal Abbruch* Taste abgebrochen.

The *Signal Cancel* button silences the operator signal that sounds when a formula completes normally. Also, if an operator signal is programmed with a chemical injection, add the chemical and press this button to resume operation.



Die *Manuell* Taste wird nicht während eines laufenden Programms benutzt.

The *Manual* button is not used during normal operation.



Die *Abbruch* Taste bricht alle verbleibenden Schritte im aktuellen Programm ab und fährt die Maschinensteuerung herunter. Das Programm kann an der abgebrochenen Stelle nicht fortgesetzt werden

The *Terminate* button cancels all remaining steps in the current formula and starts the shutdown procedure for the machine. The formula can not be resumed.



Mit der *Tür entriegeln* Taste wird die Tür geöffnet, unter Berücksichtigung der Sicherheitseinrichtungen.

The *Unlock Door* button allows you to open the door if all other safety conditions are met.

— Ende BICJHF01 —

— End of BICJHF01 —

## Kapitel 2

# Normaler Maschinenbetrieb

## Chapter 2

# Normal Operation

BICJVO03 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: GER01 Applic: CJV CJH CJF CJX

### 2.1. Normaler Maschinenbetrieb

### Normal Machine Operation

#### 2.1.1. Beginnen Sie hier, bezüglich der Sicherheit

#### Start Here for Safety

Dieses Dokument soll dem Benutzer wichtige Hinweise zum Maschinenbetrieb geben. Starten sie die Maschine nicht bevor sie von qualifiziertem Fachpersonal eine Einweisung bekommen haben.

This document is designed to remind the person operating this washer-extractor what is required to operate this machine. Do not attempt to operate this machine before a trained operator has explained the details to you.



**VORSICHT GEFAHR [1]: Mehrfache Gefahren**—Unvorsichtige Bedienung kann zu Verletzung oder gar Tod von Personen führen, zur Beschädigung oder Zerstörung der Maschine und anderer Gegenstände sowie zum Erlöschen der Garantie.

**DANGER [1]: Multiple Hazards**—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.



**ACHTUNG [2]: Todes- und Verbrennungsgefahr durch Stromschlag**—Die Berührung von unter Hochspannung stehenden Teilen kann ernsthafte Verletzungen oder Stromschlag mit Todesfolge hervorrufen. Hochspannung liegt im Inneren des Schaltschranks an, solange der Trennschalter für die Stromversorgung zur Maschine nicht ausgeschaltet ist.

**CAUTION [2]: Electrocution and Electrical Burn Hazards**—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.








- Entriegeln oder öffnen Sie nicht die Türen der Schaltkästen.
- Machen Sie sich mit der Position des Hauptschalters der Maschine vertraut und betätigen Sie diesen im Notfall, damit kein Strom mehr an der Maschine anliegt.
- Die Maschine darf ausschließlich von

- Do not unlock or open electric box doors.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.

qualifiziertem und autorisiertem Personal instandgesetzt werden. Sie müssen die Gefahrenquellen eindeutig verstanden haben und wissen, wie Gefahren zu vermeiden sind.

### 2.1.2. Überprüfen Sie die Schalterstellungen

### Check Switch Settings

Anzeige oder Aktion [Display or Action]	Erklärung	Explanation
	Stellen Sie sicher, dass der <i>Betrieb/Programmieren</i> Schlüsselschalter auf  steht.	Check that the <i>run/program</i> keyswitch is at  .
	Stellen Sie sicher, dass die <i>Notaus</i> Tasten <i>nicht betätigt</i> sind.	Check that any <i>emergency stop</i> switches are in the <i>out</i> position.
	Stellen Sie sicher, dass der Hauptschalter, wenn vorhanden, auf  steht.	Check that the master switch, if provided, is at  .

#### Ergänzung 1

##### Die Zeitverzögerung nach dem Einschalten

Einige Milnor® Wasch-Schleudermaschinen verwenden keinen Drehzahlsensor, um zu überprüfen, ob die Trommel zum Stillstand gekommen ist. Wenn daher die Maschine erstmals eingeschaltet wird, können weitere Operationen erst nach mindestens 80 Sekunden Wartezeit ausgeführt werden. Diese Zeit reicht aus, damit die Trommel vollständig zum Stillstand kommt, wenn die Betriebsspannung unterbrochen wurde, als die Maschine einen Schleudervorgang mit hoher Drehzahl ausführte und wieder eingeschaltet wurde, bevor die Trommel zum Stillstand kam.

#### Supplement 1

##### The Power-up Safety Delay

Some Milnor® washer extractors do not use a speed sensing device to verify that the basket has stopped rotating. Therefore, when power is first applied to the machine, at least 80 seconds must elapse before any further operations can be attempted. This provides sufficient time for the basket to coast to a complete stop if power was lost while the machine was in a high speed extract and restored before the basket stopped.

### 2.1.3. Beladen der Maschine

Beladen Sie die Maschine bis die Ladekapazität erreicht ist.

### Load the Machine

Load the machine to the rated capacity and securely close the loading door.

## 2.1.4. Auswählen und Starten eines Programms Select and Start a Formula

### Anzeige oder Aktion [Display or Action]

RUN FORMULA  
00 OK TO POWER OFF

RUN FORMULA  
00 OK TO POWER OFF

### Erklärung

Das ist das *Formel zur Berechnung der Auslastung* Menü. Hier können Sie ein Programm auswählen und starten. Um die Maschine auszuschalten, sollten Sie ebenfalls dieses Menü aufrufen. Dadurch können Schäden im Maschinenspeicher oder an elektronischen Bauteilen vermieden werden.

### Explanation

This is the *Run Formula* display. From this display, you can disconnect power from the machine without risking damage to electronic parts, or you can select a formula to run.



RUN FORMULA  
07 FORMULA NUMBER 07

RUN FORMULA  
07 FORMULA NUMBER 07

Springt vorwärts oder rückwärts zwischen den 30 Programmen

indexes forward/backward through the 30 formulas.

Besispiel: *Programm 07* ausgewählt

Example display: *Formula 07* selected for running



RUN FORMULA  
DOES NOT EXIST

RUN FORMULA  
DOES NOT EXIST

Startet das ausgewählte Programm

starts the machine with the selected formula.

Bedeutet, dass das ausgewählte Programm nicht existiert. Diese Meldung wird für 3 Sekunden angezeigt.

indicates that the formula selected for running has not been programmed. This display appears for three seconds.

## 2.1.5. Anzeigen auf dem Display Monitor Operation

Anzeige oder Aktion [Display or Action]	Erklärung	Explanation
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">23:04 F02S01 02:37 TEMP A168/D170 LEV 1</div> <div style="border: 1px solid black; padding: 2px;">23:04 F02S01 02:37 TEMP A168/D170 LEV 1</div>	Diese beiden Anzeigen erscheinen während des normalen Maschinenbetrieb bei einigen E-P Plus® Modellen abwechselnd. Die E-P Express® Modelle zeigen bei diesem Schritt andere Daten an, nicht jedoch die Badtemperatur.	These two displays alternate during normal operation on some E-P Plus® models. E-P Express® models display other data about the step, but not bath temperature data.
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">23:04 STEP 01 02:37 TEMP A168/D170 SPD 0</div> <div style="border: 1px solid black; padding: 2px;">23:04 STEP 01 02:37 TEMP A168/D170 SPD 0</div>	STEP01 ist der aktuelle Schritt	STEP01 is the current step.
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">23:04 F02S01 02:37</div> <div style="border: 1px solid black; padding: 2px;">23:04 F02S01 02:37</div>	EXTRACT bedeutet, dass die Maschine momentan schleudert	EXTRACT indicates that the machine is extracting the goods.
	TIMEHALT bedeutet, dass der Timer gestoppt wurde und die Maschine auf die Waschmittelspülung wartet. Für diese Funktion muss die Waschmitteldosierung bzw. Flüssigdosierung richtig eingestellt sein.	TIMEHALT indicates that the timer is stopped for a chemical injection. The chemical supply equipment must be properly installed for this feature to work.
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">TEMP A168/D170 LEV 1</div> <div style="border: 1px solid black; padding: 2px;">TEMP A168/D170 LEV 1</div>	Die E-P Plus® Maschine kann die Temperatur in Grad Fahrenheit oder Grad Celsius anzeigen, je nach der Maschinenkonfiguration.	Temperature in this E-P Plus® machine is measured in degrees Fahrenheit or Celsius, according to machine configuration.
	A168 ist die aktuelle Temperatur in der Trommel. Die Temperatur wird nur dann angezeigt, wenn die Maschinen mit einem Temperaturfühler ausgestattet ist und richtig konfiguriert wurde.	A168 indicates that the current achieved temperature is 168 degrees. Temperature is displayed only if machine is equipped with and configured for temperature control.

**Anzeige oder Aktion**  
[Display or Action]

**Erklärung**

**Explanation**

SPD 0	LEV 2
SPD 0	LEV 2

D170 ist die programmierte Temperatur die erreicht werden soll. Die Temperatur wird nur dann angezeigt, wenn die Maschinen mit einem Temperaturfühler ausgestattet ist und richtig konfiguriert wurde.

D170 indicates that the desired temperature for this step is 170 degrees. Temperature is displayed only if the machine is equipped with and configured for temperature control.

LEV 2 bedeutet, dass aktuell der Wasserstand Level 2 erreicht ist.

LEV 2 indicates that the bath level achieved is Level 2.

SPD 0 ist die Waschgeschwindigkeit für diesen Schritt

SPD 0 indicates the bath speed for this step.

WAIT FOR LEVEL 2 H zeigt an, dass Level 2 für diesen Schritt programmiert wurde aber noch nicht erreicht ist. Das H bedeutet, dass das Ventil für Heißwasser geöffnet ist. C steht für Kaltwasser und 3 für Drittes Wasser (z.B. Rückgewinnung).

WAIT FOR LEVEL 2 H indicates that Level 2 is programmed for this step, but is not yet achieved. The H indicates that the hot water valve is open; C indicates cold water, and 3 indicates extra water.

CHEM 03 wird angezeigt, wenn Waschmittel 03 eingespült wird. Je nach Waschmittel das eingespült wird (bis zu 5 können angeschlossen sein), wird die dazugehörige Nummer auf dem Display angezeigt.

CHEM 03 is displayed when Chemical 03 is being injected. The number for each chemical (up to five may be connected) is displayed as the chemical is injected.

FINAL EXTRACT bedeutet, dass der aktuelle Schritt auch der letzte Schritt des Waschprogramms ist.

FINAL EXTRACT indicates that the step in progress is the final step of the wash formula.

**2.1.6. Ein laufendes Programm abbrechen**

**How to Terminate a Running Formula**

**Anzeige oder Aktion**  
[Display or Action]

**Erklärung**

**Explanation**



Bricht das aktuelle Programm ab. Display wechselt zur *Programm starten* Anzeige (siehe [Abschnitt 2.1.4](#) “Auswählen und Starten eines Programms”).

Cancels the current formula and returns the machine to the *Run Formula* display (see [Section 2.1.4](#) “Select and Start a Formula”).



### 2.1.7. Neustart nach einem Stromausfall

Im Falle eines Stromausfalls oder jeder anderen Art der Stromunterbrechung merkt sich die Maschinensteuerung das laufende Programm und den aktuell ausgeführten Schritt.

### How to Restart after Losing Power

The control remembers the formula and step it was executing if power fails or if the wall disconnect is turned off while the machine is operating in automatic mode.

**Anzeige oder Aktion**  
[Display or Action]

```
PRESS START TO RUN
STEP xx - FORMULA yy

PRESS START TO RUN
STEP xx - FORMULA yy
```

**Erklärung**

Auf dem Display der meisten Maschinenmodelle erscheint diese Meldung, sobald die Energiezufuhr wieder hergestellt ist. Das Programm und der Schritt in dem die Maschine unterbrochen wurde werden angezeigt.

**Explanation**

On most machine models, this display appears when power is restored. The formula and step which were in progress when power was interrupted are shown.

1

Führt das Programm fort in dem Schritt wo es abgebrochen wurde. Wenn das Programm während eines Waschschruttes unterbrochen wurde, müssen der programmierte Wasserstand und die programmierte Temperatur erst wieder erreicht werden, auch wenn dies vor der Unterbrechung schon der Fall war. Alle programmierten Waschmittel werden erneut eingespült.

Resumes the formula at the displayed formula and step. If the outage occurred in a bath step, level and temperature (if commanded) must again be satisfied, even if these were already satisfied before power was lost. Any commanded chemicals will be injected again.

Wenn das Programm im Entwässerungsteil eines Waschschruttes unterbrochen wurde, wird nach einem Neustart der gesamte Waschschrut wiederholt.

If the outage occurred during the drain part of a bath step, the bath step will be repeated, then followed by the next commanded step.

Wenn das Programm während eines Schleuderschruttes unterbrochen wurde, wird nach dem Neustart der Waschschrut vor dem Schleuderschrut und der betroffene Schleuderschrut wiederholt.

If the outage occurred during an extract step, the previous bath will be repeated before the extract step begins.

### 2.1.8. Maschine Entladen



**VORSICHT GEFAHR 3:** Gefahr von Einwicklung und ernsthaften Verletzungen—Berührung von Artikeln während ihrer Bearbeitung kann bewirken, daß

### Unload the Machine

**DANGER 3:** Entangle and Sever Hazards—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember

sich die Artikel um Körper oder Gliedmaßen wickeln und diese abtrennen. Im Normalfall sind die Artikel durch die geschlossene Tür abgeschirmt.

- Berühren Sie keine Artikel, die sich innerhalb der drehenden Trommel befinden oder teilweise heraushängen.

Wenn ein Programm mit einem Waschschrift endet oder in diesem Schritt abgebrochen wird, rollt die Trommel für 25 Sekunden aus. Wenn der Schritt ein Schleuderschrift ist beträgt die Ausrollzeit der Trommel etwa 180 Sekunden. Versuchen sie nicht die Tür vor Ablauf dieser Zeit zu öffnen.

you. The goods are normally isolated by the locked cylinder door.


- Do not touch goods inside or hanging partially outside the turning cylinder.

When the formula ends or is terminated, the cylinder coasts for 25 seconds if the last step was a bath step. If the last step was an extract, the coast time may be as much as 180 seconds. Do not attempt to open the door early.

**Anzeige oder Aktion**  
[Display or Action]

UNLOCKING THE DOOR  
PLEASE WAIT

UNLOCKING THE DOOR  
PLEASE WAIT

WAITING TO UNLOAD  


WAITING TO UNLOAD  




**Erklärung**

Anzeige während der letzten 15 Sekunden des Ausrollens der Trommel oder während der gesamten Ausrollzeit, wenn das Programm abgebrochen wurde.

Am Ende der Ausrollzeit ertönt ein Signal

Bricht das Signal ab. Die Tür entriegelt, so dass die Maschine entladen werden kann.

**Explanation**

display during the last 15 seconds of coast, or during the entire coast time if the formula was manually terminated.

At the end of the coast time, the operator alarm sounds.

Silences the operator alarm. The door unlocks so you can unload the machine.

# Kapitel 3

## Fehlerbeseitigung

# Chapter 3

## Correcting Errors

BICJHT04 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: GER01 Applic: CJV CJH CJF CJX

### 3.1. Fehlermeldung während eines laufenden Programms

Wenn während eines laufenden Programms eine Fehlermeldung erscheint wird stoppt der Timer. Wenn der Fehler behoben ist läuft der Timer für das Programm weiter.

Einige Fehler lassen sich dadurch beheben, dass sie das Programm stoppen und die Maschine aus und wieder ein schalten. Das Programm muss gestoppt und darf nicht abgebrochen werden, wenn es nach dem Neustart der Maschine fortgesetzt werden soll. Lesen sie bitte das Technische Handbuch um weitere Informationen zu erhalten.

### Error Messages During Normal Operation

If an error message appears on the bottom line of the display while the machine is running, the timer shown on the top line will stop counting. When the error is corrected, the timer resumes counting down. To troubleshoot most errors, suspend the formula in progress and turn power off. Do not terminate the formula if it is to be resumed after the error is corrected. See the reference manual for more information.

**Anzeige oder Aktion**  
[Display or Action]

LEVELS STILL MADE

LEVELS STILL MADE

TOO LONG TO FILL

TOO LONG TO FILL

TOO LONG TO STEAM

TOO LONG TO STEAM

**Erklärung**

Die Steuerung hat die Information, dass sich noch Wasser in der Maschine befindet. Diese Fehlermeldung taucht während oder unmittelbar vor einem Schleuderschnitt auf oder wenn ein Spülschritt folgen soll. Diese Fehlermeldung verschwindet von selbst, sobald sich kein Wasser mehr in der Maschine befindet.

Die Wasserbefüllung der Maschine hat länger als 10 Minuten gedauert. Überprüfen sie die Wasserventile, die Schmutzfangsiebe, die Wasserzuleitungen und den Wasserdruck. Die Maschine zieht so lange Wasser bis das programmierte Wasserlevel erreicht ist. Nach Erreichen des Levels verschwindet die Fehlermeldung und das Programm wird fortgesetzt.

**Nur für die Modelle E-P-Plus** Die konfigurierte maximale Zeit zum Erreichen der Solltemperatur mit Dampfheizung ist abgelaufen. Prüfen Sie das Dampfventil, das Schmutzfangsieb, den Hauptdampfverteiler, den Druck usw. Die Dampfheizung wird fortgesetzt, bis die Temperatur erreicht ist; dann wird die Fehlermeldung automatisch gelöscht und der normale Maschinenbetrieb wird wieder aufgenommen.

**Explanation**

The microprocessor is still receiving information that a level is made just before or during an extract step, or immediately before the fill for a bath step. This error is self-clearing when level is lost.

Time to fill to level exceeded 10 minutes. Check the water valves, strainers, supply lines, and water pressure. The machine will continue to fill until level is reached, at which time the error will automatically clear and normal operation will resume.

**E-P Plus models only.** The configured maximum time to steam up to the desired temperature has been exceeded. Check the steam valve, strainer, main steam header and pressure, etc. Steaming will continue until temperature is achieved, when the error will automatically clear and normal operation will resume.

**Anzeige oder Aktion**  
[Display or Action]

TOO LONG TO COOL

TOO LONG TO COOL

**Erklärung**

**Nur für die Modelle E-P-Plus**Die konfigurierte maximale Zeit für den Cooldown auf die Solltemperatur wurde überschritten. Prüfen Sie das Kühlventil und das ggf. vorhandene Schmutzfangsieb, den Kaltwasserdruck und die Position des Dosierventils für den Kühlwasserzulauf. Die Kühlung wird fortgesetzt, bis die Solltemperatur erreicht ist, danach wird die Fehlermeldung automatisch gelöscht.

**Explanation**

**E-P Plus models only.**The configured maximum time to cool down to the desired temperature has been exceeded. Check the cooldown valve and strainer if equipped, cold water pressure, and position of vernier valve on cooldown inlet. Cooldown will continue until the desired temperature is achieved, when the error will automatically clear.

TOO LONG TO DRAIN

TOO LONG TO DRAIN

Die Maschine hat das Wasser in der vorgegebenen Ablasszeit nicht vollständig abgelassen. Diese Fehlermeldung verschwindet sobald das Wasserlevel niedrig genug ist um mit dem nächsten Schritt fortzufahren.

The machine did not drain properly in the allotted drain time. This self-correcting error will clear when the water level in the basket is low enough to begin the next operation.

CHECK PROBE

CHECK PROBE

**Nur für die Modelle E-P-Plus**Diese Fehlermeldung zeigt an, dass der Widerstand des Temperaturfühlers außerhalb des bestimmten Bereichs liegt. Testen Sie den Fühler, indem Sie die Adern des Fühlers von der Prozessorkarte abklemmen und den Widerstand mit einem genauen digitalen Ohmmeter messen. Der Widerstand zwischen den beiden Kabeladern muss zwischen 2 und 35 Kiloohm liegen. Der Widerstand zwischen jeder Kabelader und Masse muss unendlich sein.

**E-P Plus models only.**This error message indicates that the resistance of the temperature probe is outside the specified range. Test the probe by disconnecting the probe leads from the processor board and checking the resistance with an accurate digital ohmmeter. Resistance between the two leads must be between 2K and 35K Ohms. Resistance between each lead and ground must be infinite.

EXTERNAL FAULT

EXTERNAL FAULT

An fast allen Maschinen bedeutet diese Fehlermeldung, dass ein Problem mit der Waschmitteldosieranlage vorliegt. In der Regel ist ein Waschmittel leer. Wenn das Waschmittel wieder aufgefüllt ist verschwindet diese Fehlermeldung automatisch und der normale Maschinenbetrieb kann fortgesetzt werden.

On most machines, this error indicates that the programmed chemical injection failed, usually because the chemical supply system is empty. When chemicals are added and can be injected, this error clears automatically, allowing operation to resume.

**Anzeige oder Aktion**  
[Display or Action]

**Erklärung**

**Explanation**

BRAKE PRESS. FAULT

BRAKE PRESS. FAULT

An 48040F7J/F7B Modellen einen Abfall des Luftdrucks im Lagerblock. Der aufgebaute Luftdruck im Lagergehäuse hilft das Hauptlager vor Wasser zu schützen.

On 48040F7J/F7B models, this error indicates that the bearing air pressure is below the minimum required to help protect the bearing from water contamination.

Diese Fehlermeldung wird nur bei Maschinen mit Luftzylinderbremse angezeigt. Die Bremse ist betätigt an einer Stelle des Programms an dem sie nicht betätigt sein sollte. Normalerweise tritt dieser Fehler auf, wenn der Bremszylinder nicht ausreichend mit Luft versorgt wird. Überprüfen Sie den Luftdruck.

This error appears only on machine models equipped with a cylinder brake. The message indicates that the brake is engaged when it should be disengaged. This is usually because the machine is not receiving sufficient air pressure to open the normally-closed brake. Check the plant compressed air supply.

THREE WIRE DISABLED

THREE WIRE DISABLED

Das Relais mit 3 Anschlüssen muss abgefallen sein. Dieses Relais liefert die Steuerspannung für die Maschine. Wenn das Relais kurzzeitig mit *Start* Taste (T) aktiviert wird, bleibt es sich durch seine Schließerkontakte weiter angezogen - ebenso bei Motorüberlastung, Aktivierung der Türverriegelung usw. Wenn einer dieser Kontakte kurzzeitig unterbrochen wird, stoppt die Maschine und zeigt diese Meldung an. Diesen Fehler können Sie nur löschen, wenn Sie die *Start* Taste (T) drücken und der Fehler nicht mehr besteht.

The three-wire relay de-energized. This relay provides control circuit power to the machine. Once energized by momentarily depressing the *Start* button (T), it is held energized by its own normally open contacts, along with motor overloads, door interlocks, etc. Should any of these contacts open even momentarily, the machine stops and this display appears. This error can only be cleared by depressing the *Start* button (T), and only then if the error has been cleared.

INVERTER FAULT

INVERTER FAULT

Diese Fehlermeldung wird angezeigt, wenn die Steuerung nach 14 Sekunden noch kein Input vom Frequenzwandler bekommen hat. Die Trommel steht, der Timer stoppt und der Ablass öffnet. Drücken Sie die *Weiter* Taste (N) um neu zu starten.

This error message appears if the microprocessor does not receive an input from the inverter within 14 seconds of the beginning of the formula. After 14 seconds without an inverter input, the timer stops, the basket is stationary, and the drain valve opens. To recover, press the *Next* key (N).

**Anzeige oder Aktion**  
[Display or Action]

VIBRATION SW TRIPPED RECOVERY SEQUENCE
VIBRATION SW TRIPPED RECOVERY SEQUENCE

**Erklärung**

Wenn der Vibrationsschalter auslöst wird der Timer gestoppt. Nach 45 bzw. 85 Sekunden (120 Sekunden an 42032F7J Modellen) reversiert die Trommel mit Waschgeschwindigkeit und Wasser wird eingespült. Wenn das niedrige Wasserlevel erreicht ist reversiert die Trommel für eine weitere Minute und beschleunigt dann auf Schleudergeschwindigkeit.

**Explanation**

When the vibration switch closes, the timer stops. After 45 to 85 seconds (120 seconds on 42032F7J models), the basket reverses at wash speed as the cylinder fills with water. When low level is achieved, the cylinder reverses for one additional minute at wash speed, then accelerates to extract speed.

— Ende BICJHT04 —

— End of BICJHT04 —

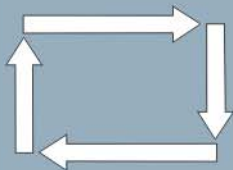




**Section**  
**Español**

**3**





Published Manual Number: MQCJVO01ES

- Specified Date: 20090831
- As-of Date: 20090831
- Access Date: 20100607
- Depth: Detail
- Custom: n/a
- Applicability: CJV CJH CJF CJX
- Language Code: SPA01, Purpose: publication, Format: 2colA

## Guía del operario [Operator Guide]—

# Modelos de Lavadoras- Extractoras con controles E-P Plus<sup>®</sup> y E-P Express<sup>®</sup> [Washer- extractor Models with E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Controls]

**PRECAUCIÓN:** La Corporación Pellerin Milnor proporcionó la información contenida en este manual, en la **Versión en inglés solamente**. Milnor realizó su mejor esfuerzo para ofrecer una traducción de calidad, pero no declara, promete o garantiza la exactitud, integridad o adecuación de la información contenida en la versión no escrita en inglés.

Además, Milnor no ha hecho ninguna verificación de la información contenida en la versión no escrita en inglés, ya que fue completamente elaborada por terceros. Por lo tanto, Milnor expresamente niega cualquier responsabilidad por errores en sustancia o forma y no se responsabiliza por la utilización como fuente de apoyo, o consecuencias de utilizar la información en la versión no escrita en inglés.

**Bajo ninguna circunstancia deberá Milnor o sus representantes o funcionarios ser responsables por daños directos, indirectos, incidentales, punitivos o consecuentes que puedan resultar del uso o mal uso, utilizar como fuente de apoyo la versión no escrita en inglés de este manual, o que puedan resultar de faltas, omisiones o errores en la traducción.**

[Lea el Manual de seguridad](#)

**Aplicable Milnor® productos por número de modelo: [Aplicable Milnor® products by model number:]**

30015T5X	30015V7J	30022H8J	30022T5X	30022V6J	30022VRJ	30022X8J
36021V5J	36021V7J	36026V5J	36026V7J	36026X8J	42026V6J	42026X7J
42030V6J	42032X7J	48040F7B	48040F7J	MWR12J5	MWR12X5	MWR16J5
MWR16X5	MWR18J4	MWR18J6	MWR18X4			

# Índice general [English table of contents follows]

Secciones	Figuras, tablas y complementos
<b>Capítulo 1. Descripción de los Controles</b>	
<b>1.1. Controles del operario de los modelos E-P Plus® y E-P Express®</b> (Documento BICJHF01)	Figura 1: Típico panel de control
<b>Capítulo 2. Operación Normal</b>	
<b>2.1. Operación Normal de la Máquina</b> (Documento BICJVO03)	
2.1.1. Comience aquí por razones de seguridad	
2.1.2. Chequee la posición de los interruptores	Complemento 1: Atraso en el encendido por razones de seguridad
2.1.3. Cargue la Máquina	
2.1.4. Seleccione y comience una fórmula	
2.1.5. Supervisión de la Operación	
2.1.6. Cómo poner fin a un Fórmula en ejecución	
2.1.7. Cómo reiniciar después de perder la electricidad	
2.1.8. Descargue la Máquina	
<b>Capítulo 3. Corrección de Errores</b>	
<b>3.1. Mensajes de error durante la operación normal</b> (Documento BICJHT04)	

# Table of Contents

Sections	Figures, Tables, and Supplements
<b>Chapter 1. Description of Controls</b>	
<b>1.1. Operator Controls on E-P Plus® and E-P Express® Models</b> (Document BICJHF01)	Figure 1: Typical Control Panel
<b>Chapter 2. Normal Operation</b>	
<b>2.1. Normal Machine Operation</b> (Document BICJVO03)	
2.1.1. Start Here for Safety	
2.1.2. Check Switch Settings	Supplement 1: The Power-up Safety Delay
2.1.3. Load the Machine	
2.1.4. Select and Start a Formula	
2.1.5. Monitor Operation	
2.1.6. How to Terminate a Running Formula	
2.1.7. How to Restart after Losing Power	
2.1.8. Unload the Machine	
<b>Chapter 3. Correcting Errors</b>	
<b>3.1. Error Messages During Normal Operation</b> (Document BICJHT04)	

## Capítulo 1

# Descripción de los Controles

## Chapter 1

# Description of Controls

BICJHF01 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: SPA01 Applic: CJV CJH CJF CJX

### 1.1.

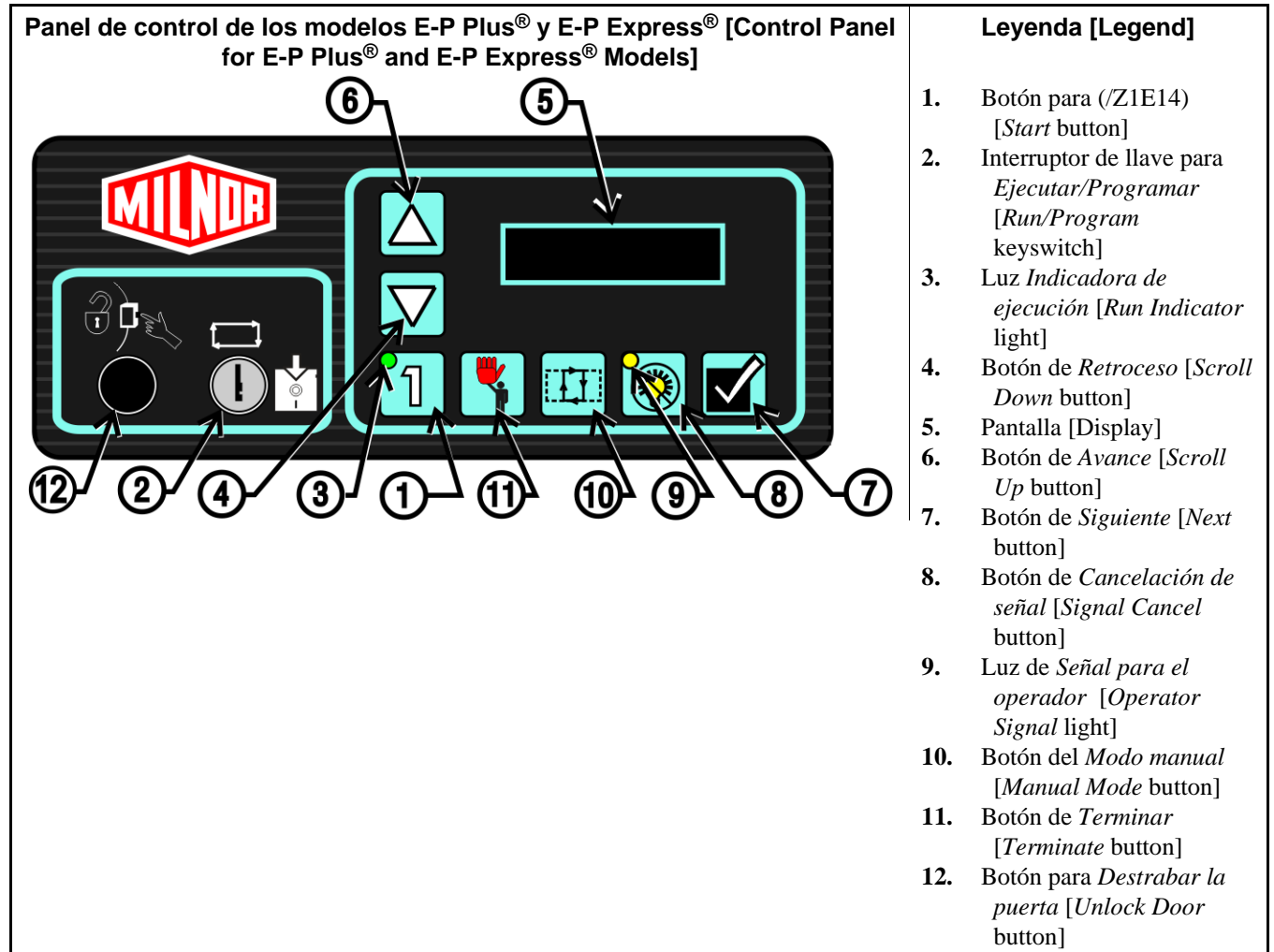
#### **Controles del operario de los modelos E-P Plus<sup>®</sup> y E-P Express<sup>®</sup>**

Este documento describe los controles de los usuarios durante el funcionamiento normal de la máquina. Para obtener información adicional sobre otros controles mostrados en [Figura 1](#), consulte el manual de referencia.

#### **Operator Controls on E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Models**

This document describes the user controls during normal machine operation. For additional information on other controls shown in [Figure 1](#), see the reference manual.

Figura [Figure] 1: Típico panel de control [Typical Control Panel]



**Visualización o acción**  
[Display or Action]





**Explicación**

**Explanation**

- |       |  |  |
|-------|--|--|
| 1     | Cuando la pantalla muestra <i>Ejecute la fórmula</i> presione este botón para comenzar.  | When the display says <i>Run Formula</i> , press this button to start the formula.                           |
| ☐ / ☒ | En condiciones normales de operación, el interruptor de llave de <i>Ejecutar/Programar</i> debe estar situado en ☐ . Esta es la posición automática. | During normal operation, the <i>Run/Program</i> keyswitch must be set to ☐ . This is the automatic position. |
| ▲ / ▼ | Utilice los botones de <i>Avance</i> y de <i>Retroceso</i> para seleccionar la fórmula que desee.  | Use the <i>Scroll Up</i> and <i>Scroll Down</i> buttons to select the desired formula.                       |
| ☑     | El botón de <i>Siguiente</i> no se utiliza durante la operación normal.  | The <i>Next</i> button is not used during normal operation.  |



**Visualización o acción**  
[Display or Action]

Explicación	Explanation
 Cuando una fórmula es completada el botón de <i>Cancelamiento de señal</i> es usado para silenciar la señal. Si la señal para el operador está programada para la inyección de una sustancia química, añade el producto químico y presione este botón para reanudar la operación y eliminar las señales sonora y luminosa.	The <i>Signal Cancel</i> button silences the operator signal that sounds when a formula completes normally. Also, if an operator signal is programmed with a chemical injection, add the chemical and press this button to resume operation.
 El botón de <i>Manual</i> no se utiliza durante la operación normal.	The <i>Manual</i> button is not used during normal operation.
 El botón de <i>Terminar</i> cancela todos los restantes pasos en la fórmula actual e inicia el proceso de apagado de la máquina. La fórmula no se puede reanudar.	The <i>Terminate</i> button cancels all remaining steps in the current formula and starts the shutdown procedure for the machine. The formula can not be resumed.
 El botón de <i>Destrabar la puerta</i> le permite abrir la puerta si todas las demás condiciones de seguridad se cumplen.	The <i>Unlock Door</i> button allows you to open the door if all other safety conditions are met.

— Fin de BICJHF01 —

— End of BICJHF01 —

## Capítulo 2

# Operación Normal

## Chapter 2

# Normal Operation

BICJVO03 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: SPA01 Applic: CJV CJH CJF CJX

### 2.1. Operación Normal de la Máquina

### Normal Machine Operation

#### 2.1.1. Comience aquí por razones de seguridad

#### Start Here for Safety

Este documento tiene por objeto recordar a la persona que opere esta lavadora-extractora de lo que se requiere para operar esta máquina. No intente operar esta máquina antes de que un operador entrenado le haya explicado todos los detalles.

This document is designed to remind the person operating this washer-extractor what is required to operate this machine. Do not attempt to operate this machine before a trained operator has explained the details to you.



**PELIGRO [1]: Riesgos diversos**—Las acciones descuidadas de los operarios pueden causar heridas o la muerte, dañar o destruir la máquina, causar daños a la propiedad o anular la garantía.

**DANGER [1]: Multiple Hazards**—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.



**PRECAUCIÓN [2]: Riesgos de electrocución y quemaduras por electricidad**—El contacto con la electricidad puede ocasionarle lesiones graves o la muerte. La electricidad está presente dentro del gabinete, a menos que el interruptor principal, fuera de la máquina, esté desconectado.

**CAUTION [2]: Electrocution and Electrical Burn Hazards**—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.








- No destrabe ni abra las puertas de los tableros eléctricos.
- Conozca la ubicación de la desconexión principal y aprenda a utilizarla en una emergencia para eliminar toda la energía eléctrica dentro de la máquina.
- No realice ningún servicio a la máquina a menos que esté calificado y autorizado. Comprenda claramente los peligros y la

- Do not unlock or open electric box doors.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.

manera de evitarlos.

### 2.1.2. **Chequee la posición de los interruptores**

### **Check Switch Settings**

Visualización o acción [Display or Action]	Explicación	Explanation
	Chequee que el interruptor de llave de <i>Ejecutar/programar</i> esté en la posición  .	Check that the <i>run/program</i> keyswitch is at  .
	Chequee que el interruptor de <i>Parada de emergencia</i> esté halado hacia <i>afuera</i> .	Check that any <i>emergency stop</i> switches are in the <i>out</i> position.
	Compruebe que el interruptor maestro, si se proporciona, se encuentre en la posición  .	Check that the master switch, if provided, is at  .

#### Complemento 1

#### **Atraso en el encendido por razones de seguridad**

Algunas lavadoras-extractoras Milnor® no están provistas de un detector de velocidad que compruebe que la canasta ha dejado de girar. Estas máquinas, sin embargo, están programadas para tener por lo menos 80 segundos de espera después de haber sido encendidas y antes de que se ejecuten otras operaciones. Esto facilita a la canasta el tiempo necesario para detenerse completamente si se pierde potencia en el momento de máxima velocidad de extracción de la máquina y se recupera antes de que la canasta se detenga.

#### Supplement 1

#### **The Power-up Safety Delay**

Some Milnor® washer extractors do not use a speed sensing device to verify that the basket has stopped rotating. Therefore, when power is first applied to the machine, at least 80 seconds must elapse before any further operations can be attempted. This provides sufficient time for the basket to coast to a complete stop if power was lost while the machine was in a high speed extract and restored before the basket stopped.

### 2.1.3. **Cargue la Máquina**

Cargue la máquina a su capacidad nominal y cierre la puerta. Cerciórese de que esté bien cerrada.

### **Load the Machine**

Load the machine to the rated capacity and securely close the loading door.

### 2.1.4. Seleccione y comience una fórmula

### Select and Start a Formula

**Visualización o acción**  
[Display or Action]

```
Ejecute Fórmula
00 Lista para desco.

RUN FORMULA
00 OK TO POWER OFF
```



```
Ejecute Fórmula
Fórmula Número 07

RUN FORMULA
07 FORMULA NUMBER 07
```



```
Ejecute Fórmula
NO EXISTE

RUN FORMULA
DOES NOT EXIST
```

**Explicación**

Esta es la pantalla *Ejecute Fórmula*. La pantalla muestra que: (a) se puede desconectar la electricidad de la máquina sin correr el riesgo de dañar los componentes electrónicos o (b) se puede seleccionar una fórmula para ser ejecutada.

Busque avanzando / retrocediendo a través de las 30 fórmulas.

Ejemplo mostrado: *Fórmula 07* seleccionada para ejecución

La máquina comienza con la fórmula seleccionada.

Indica que la fórmula elegida para el funcionamiento no ha sido programada. Este aviso aparece en la pantalla durante tres segundos.

**Explanation**

This is the *Run Formula* display. From this display, you can disconnect power from the machine without risking damage to electronic parts, or you can select a formula to run.

indexes forward/backward through the 30 formulas.

Example display: *Formula 07* selected for running

starts the machine with the selected formula.

indicates that the formula selected for running has not been programmed. This display appears for three seconds.

## 2.1.5. Supervisión de la Operación Monitor Operation

**Visualización o acción**  
[Display or Action]

```
23:04 F02P01 02:37
TEMP A168/D170 NIV 1
```

```
23:04 F02S01 02:37
TEMP A168/D170 LEV 1
```

```
23:04 PASO 01 02:37
TEMP A168/D170 VEL 0
```

```
23:04 STEP 01 02:37
TEMP A168/D170 SPD 0
```

```
23:04 F02P01 02:37
```

```
23:04 F02S01 02:37
```

```
TEMP A168/D170 NIV 1
```

```
TEMP A168/D170 LEV 1
```

**Explicación**

Estas dos visualizaciones aparecen alternadamente en la pantalla durante el funcionamiento normal de algunos modelos E-P Plus®. Los modelos E-P Express® muestran información acerca del paso, pero no acerca de la temperatura de lavado.

PASO 01 es el paso en curso

EXTRACCION indica que la máquina está en el paso de extracción, removiendo la humedad a una velocidad muy alta.

Detención del tiempo (TIMEHALT) indica que el cronómetro se detiene para la inyección de una sustancia química. Los equipos de suministro de productos químicos deben estar correctamente instalados para cumplir esta función.

La temperatura en esta máquina E-P Plus® se mide en grados Fahrenheit o Celsius, de acuerdo con la configuración de la máquina.

A168 indica que la temperatura alcanzada es 168 grados. La temperatura se muestra sólo si la máquina está equipada y configurada para el control de la temperatura.

**Explanation**

These two displays alternate during normal operation on some E-P Plus® models. E-P Express® models display other data about the step, but not bath temperature data.

STEP01 is the current step.

EXTRACT indicates that the machine is extracting the goods.

TIMEHALT indicates that the timer is stopped for a chemical injection. The chemical supply equipment must be properly installed for this feature to work.

Temperature in this E-P Plus® machine is measured in degrees Fahrenheit or Celsius, according to machine configuration.

A168 indicates that the current achieved temperature is 168 degrees. Temperature is displayed only if machine is equipped with and configured for temperature control.

**Visualización o acción**  
[Display or Action]

VEL 0	NIV 2
SPD 0	LEV 2

**Explicación**

D170 indica que la temperatura deseada para este paso es 170 grados. La temperatura se muestra sólo si la máquina está equipada y configurada para el control de la temperatura.

NIV 2 indica que el nivel alcanzado durante el paso de lavado es el nivel 2.

VEL 0 indica la velocidad durante el ciclo de lavado.

ESPERA DEL NIVEL 2 H indica que el nivel 2 está programado para este paso, pero aún no se ha logrado. La H indica que la válvula de agua caliente está abierta; C indica agua fría, y 3 indica una válvula de agua adicional.

QUIM 03 indica que la sustancia química 03 se está inyectando. La máquina tiene capacidad para inyectar cinco productos químicos al mismo tiempo.

EXTRACCCION FINAL indica que el paso en curso es el último paso de la fórmula.

**Explanation**

D170 indicates that the desired temperature for this step is 170 degrees. Temperature is displayed only if the machine is equipped with and configured for temperature control.

LEV 2 indicates that the bath level achieved is Level 2.

SPD 0 indicates the bath speed for this step.

WAIT FOR LEVEL 2 H indicates that Level 2 is programmed for this step, but is not yet achieved. The H indicates that the hot water valve is open; C indicates cold water, and 3 indicates extra water.

CHEM 03 is displayed when Chemical 03 is being injected. The number for each chemical (up to five may be connected) is displayed as the chemical is injected.

FINAL EXTRACT indicates that the step in progress is the final step of the wash formula.

**2.1.6. Cómo poner fin a un Fórmula en ejecución**

**How to Terminate a Running Formula**

**Visualización o acción**  
[Display or Action]



**Explicación**

Cancela la fórmula actual y devuelve la máquina a la pantalla *Ejecutar Fórmula* (ver Sección 2.1.4 “*Seleccione y comience una fórmula*”).

**Explanation**

Cancels the current formula and returns the machine to the *Run Formula* display (see Section 2.1.4 “*Select and Start a Formula*”).

### 2.1.7. **Cómo reiniciar después de perder la electricidad**

El controlador recuerda en el modo automático la fórmula y el paso que estaba ejecutando cuando la máquina por cualquier circunstancia fue desconectada.

### **How to Restart after Losing Power**

The control remembers the formula and step it was executing if power fails or if the wall disconnect is turned off while the machine is operating in automatic mode.

**Visualización o acción**  
[Display or Action]

```
PRES. COM. EJECUTAR
PASOxx - FORMULAyy

PRESS START TO RUN
STEP xx - FORMULA yy
```

**Explicación**

En la mayoría de los modelos de máquinas, esto es lo que aparece en la pantalla cuando se restablece la electricidad. La fórmula y el paso que estaban en curso, cuando se interrumpió la electricidad, son mostrados.

**Explanation**

On most machine models, this display appears when power is restored. The formula and step which were in progress when power was interrupted are shown.



Reanuda la ejecución de la fórmula en el paso que aparece en la pantalla. Si la interrupción se produjo durante el ciclo de lavado, el nivel y la temperatura tienen que ser nuevamente satisfechos, aunque hubiesen sido satisfechos previamente, antes de la interrupción. De igual manera, los productos químicos serán inyectados nuevamente.

Resumes the formula at the displayed formula and step. If the outage occurred in a bath step, level and temperature (if commanded) must again be satisfied, even if these were already satisfied before power was lost. Any commanded chemicals will be injected again.

Si la interrupción se produjo durante el desagüe, el ciclo previo de lavado se repetirá seguido del próximo paso previamente programado.

If the outage occurred during the drain part of a bath step, the bath step will be repeated, then followed by the next commanded step.

Si la interrupción se produjo durante el ciclo de extracción el paso de lavado anterior se repetirá antes de que el paso de extracción sea reanudado.

If the outage occurred during an extract step, the previous bath will be repeated before the extract step begins.

### 2.1.8. **Descargue la Máquina**



**PELIGRO 3: Riesgos de enredo y peligros de mutilación**—El contacto con la ropa que se está procesando puede causar que ésta se enrede en su cuerpo o miembros y le produzca daños. Los artículos deben estar normalmente aislados dentro de la canasta y la puerta debe estar trabada.

- No toque la ropa que esté dentro o parcialmente fuera cuando la canasta esté

### **Unload the Machine**

**DANGER 3: Entangle and Sever Hazards**—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember you. The goods are normally isolated by the locked cylinder door.

- Do not touch goods inside or hanging partially outside the turning cylinder.

girando.

Cuando la fórmula termina o se rescinde, la canasta se mueve – costea - en la dirección de las manecillas del reloj por 25 segundos, si el último paso programado fue el de lavado. Si el último paso programado fue una extracción, esta rotación en un mismo sentido, durará tanto como 180 segundos. No intente abrir la puerta antes de tiempo.

When the formula ends or is terminated, the cylinder coasts for 25 seconds if the last step was a bath step. If the last step was an extract, the coast time may be as much as 180 seconds. Do not attempt to open the door early.

**Visualización o acción**  
[Display or Action]

DESTABANDO PUERTA  
POR FAVOR, ESPERE

UNLOCKING THE DOOR  
PLEASE WAIT

ESPERANDO DESCARGA  
U

WAITING TO UNLOAD  
U



**Explicación**

Lo que muestra la pantalla durante los últimos 15 segundos de “costeo” o durante todo el tiempo, si la fórmula fue terminada manualmente.

Al final del tiempo de “costeo” la señal sonora llama la atención del operador.

Silencia la alarma que reclamaba la atención del operador. La puerta se destraba y el operador puede iniciar la descarga de la máquina.

**Explanation**

display during the last 15 seconds of coast, or during the entire coast time if the formula was manually terminated.

At the end of the coast time, the operator alarm sounds.

Silences the operator alarm. The door unlocks so you can unload the machine.



## Capítulo 3

# Corrección de Errores

## Chapter 3

# Correcting Errors

BICJHT04 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: SPA01 Applic: CJV CJH CJF CJX

### 3.1. Mensajes de error durante la operación normal

Si aparece un mensaje de error en la línea inferior de la pantalla, mientras la máquina está funcionando, el medidor del tiempo en la línea superior detendrá el conteo. Una vez corregido el error, el medidor proseguirá con el conteo. Para solucionar la mayoría de los errores se recomienda suspender la fórmula, apagando la máquina. No termine la fórmula, a menos que desee empezarla desde un principio. Vea el manual de referencia para obtener más información.

### Error Messages During Normal Operation

If an error message appears on the bottom line of the display while the machine is running, the timer shown on the top line will stop counting. When the error is corrected, the timer resumes counting down. To troubleshoot most errors, suspend the formula in progress and turn power off. Do not terminate the formula if it is to be resumed after the error is corrected. See the reference manual for more information.

**Visualización o acción**  
[Display or Action]

CHEQUEE NIVEL AGUA

LEVELS STILL MADE

LENTA EN LLENAR

TOO LONG TO FILL

ENTRADA VAPOR LENTA

TOO LONG TO STEAM

**Explicación**

El microprocesador interpreta la señal de que algún nivel de agua se halla dentro de la canasta. Este mensaje puede ocurrir antes del ciclo de extracción o antes de alcanzar el nivel deseado durante el ciclo de lavado. El mensaje desaparece cuando el nivel real del licor se encuentre por debajo del nivel programado.

El tiempo para alcanzar el nivel deseado sobrepasó los 10 minutos. Revise las válvulas de agua, coladeras, líneas de suministro, y la presión del agua. La máquina continuará llenando hasta que alcance el nivel, en cuyo momento el mensaje se borrará y el funcionamiento normal se reanudará.

**Sólo en modelos E-P Plus.** El tiempo máximo configurado para alcanzar la temperatura deseada ha expirado. Compruebe la válvula de vapor, el colador, la línea de suministro, la presión, etc. El flujo de vapor continuará hasta que la temperatura se logre. En ese momento, el mensaje se borrará automáticamente y el funcionamiento normal se reanudará.

**Explanation**

The microprocessor is still receiving information that a level is made just before or during an extract step, or immediately before the fill for a bath step. This error is self-clearing when level is lost.

Time to fill to level exceeded 10 minutes. Check the water valves, strainers, supply lines, and water pressure. The machine will continue to fill until level is reached, at which time the error will automatically clear and normal operation will resume.

**E-P Plus models only.** The configured maximum time to steam up to the desired temperature has been exceeded. Check the steam valve, strainer, main steam header and pressure, etc. Steaming will continue until temperature is achieved, when the error will automatically clear and normal operation will resume.

**Visualización o acción**  
[Display or Action]

LENTA EN ENFRIAR
TOO LONG TO COOL

**Explicación**

**Sólo en modelos E-P Plus.**El tiempo máximo configurado para enfriar a la temperatura deseada ha expirado. Compruebe la presión del agua fría y la posición de la válvula vernier en la entrada de agua fría e inspeccione, si la máquina los posee, la válvula de enfriamiento y el colador. El proceso de enfriamiento continuará hasta que se obtenga la temperatura deseada. Una vez que se logre la temperature deseada el mensaje de error desaparecerá.

**Explanation**

**E-P Plus models only.**The configured maximum time to cool down to the desired temperature has been exceeded. Check the cooldown valve and strainer if equipped, cold water pressure, and position of vernier valve on cooldown inlet. Cooldown will continue until the desired temperature is achieved, when the error will automatically clear.

DRENAJE LENTO
TOO LONG TO DRAIN

La máquina no drena adecuadamente en el tiempo asignado. Este mensaje desaparecerá cuando el nivel de agua en la canasta sea lo suficientemente bajo que permita el comienzo del siguiente paso.

The machine did not drain properly in the allotted drain time. This self-correcting error will clear when the water level in the basket is low enough to begin the next operation.

CHEQUEE SENSOR TEMP.
CHECK PROBE

**Sólo en modelos E-P Plus.**Este mensaje de error indica que la resistencia de la sonda de temperatura está fuera del rango especificado. Examine la sonda. Para ello, desconecte los conductores de esta de la placa del procesador y compruebe la resistencia con un ohmímetro digital preciso. La resistencia entre los conductores debe ser entre 2 y 35 kiloohmios. La resistencia entre los conductores y la tierra debe ser infinita.

**E-P Plus models only.**This error message indicates that the resistance of the temperature probe is outside the specified range. Test the probe by disconnecting the probe leads from the processor board and checking the resistance with an accurate digital ohmmeter. Resistance between the two leads must be between 2K and 35K Ohms. Resistance between each lead and ground must be infinite.

FALLA EXTERNA
EXTERNAL FAULT

En la mayoría de las máquinas, este error indica que la inyección programada de productos químicos ha sido interrumpida. Cuando se añadan los productos químicos y se puedan inyectar, este error se borrará automáticamente, lo que permitirá reanudar la operación.

On most machines, this error indicates that the programmed chemical injection failed, usually because the chemical supply system is empty. When chemicals are added and can be injected, this error clears automatically, allowing operation to resume.

**Visualización o acción**  
[Display or Action]

**Explicación**

**Explanation**

FALLA. PRESION FRENO  
BRAKE PRESS. FAULT

En los modelos 48040F7J/F7B, este error indica que la presión del aire en la balinera está por debajo del mínimo necesario para ayudar a proteger a la balinera de la contaminación del agua.

On 48040F7J/F7B models, this error indicates that the bearing air pressure is below the minimum required to help protect the bearing from water contamination.

Este error aparece sólo en modelos de máquinas equipadas con un freno de cilindro. El mensaje indica que el freno está energizado cuando debiera estar desconectado. Esto es generalmente debido a que la máquina no está recibiendo suficiente aire a presión para desconectar el freno, que normalmente está cerrado. Compruebe el suministro de aire comprimido.

This error appears only on machine models equipped with a cylinder brake. The message indicates that the brake is engaged when it should be disengaged. This is usually because the machine is not receiving sufficient air pressure to open the normally-closed brake. Check the plant compressed air supply.

THREE WIRE DISABLED  
THREE WIRE DISABLED

El relé de tres cables está desconectado. Este relé permite a la máquina controlar la corriente eléctrica del circuito. Una vez que esté conectado porque se haya pulsado momentáneamente el botón *Inicio* (1), se mantendrá con corriente por sus propios contactos normalmente abiertos, así como por las sobrecargas del motor, los interruptores de seguridad de la puerta, etc. Si alguno de estos contactos se abre, aunque sea por un momento, la máquina se detendrá y aparecerá este mensaje. Este mensaje de error sólo puede eliminarse pulsando el botón *Inicio* (1).

The three-wire relay de-energized. This relay provides control circuit power to the machine. Once energized by momentarily depressing the *Start* button (1), it is held energized by its own normally open contacts, along with motor overloads, door interlocks, etc. Should any of these contacts open even momentarily, the machine stops and this display appears. This error can only be cleared by depressing the *Start* button (1), and only then if the error has been cleared.

**Visualización o acción**  
[Display or Action]


FALLA INVERSOR

INVERTER FAULT

DESCON. DE INT. VIB.  
SEC. DE RECUPERACIÓN


VIBRATION SW TRIPPED  
RECOVERY SEQUENCE

**Explicación**

Este mensaje de error aparece si el microprocesador no recibe una señal del inversor dentro de los 14 segundos del inicio de la fórmula. Después de 14 segundos sin una señal del inversor, el cronómetro se detiene, la canasta se inmoviliza, y la válvula de desagüe se abre. Para recuperar, presione *Siguiente* tecla (  ).

Cuando el interruptor de vibración se cierra, la operación normal se interrumpe y el cronómetro se detiene. Después de entre 45 y 85 segundos (120 segundos en los modelos 42032F7J), la canasta invierte su rotación en la velocidad de lavar. Luego empieza a rotar como las agujas del reloj a la velocidad de lavar, de distribución y finalmente de extracción.

**Explanation**

This error message appears if the microprocessor does not receive an input from the inverter within 14 seconds of the beginning of the formula. After 14 seconds without an inverter input, the timer stops, the basket is stationary, and the drain valve opens. To recover, press the *Next* key (  ).

When the vibration switch closes, the timer stops. After 45 to 85 seconds (120 seconds on 42032F7J models), the basket reverses at wash speed as the cylinder fills with water. When low level is achieved, the cylinder reverses for one additional minute at wash speed, then accelerates to extract speed.

— Fin de BICJHT04 —

— End of BICJHT04 —

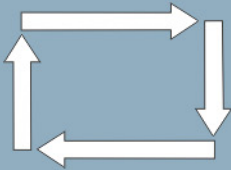


**Section**  
**Français**

**4**







**Published Manual Number: MQCJVO01FR**

- Specified Date: 20090831
- As-of Date: 20090831
- Access Date: 20091001
- Depth: Detail
- Custom: n/a
- Applicability: CJV CJH CJF CJX
- Language Code: FRE01, Purpose: publication, Format: 2colA

## **Guide de l'opérateur [Operator Guide]—**

# **Modèles de laveuse-essoreuse avec commandes E-P Plus<sup>®</sup> et E-P Express<sup>®</sup> [Washer-extractor Models with E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Controls]**

**ATTENTION:** Les informations contenues dans ce manuel ont été fournies par Pellerin Milnor Corporation dans le **version anglaise uniquement**. Milnor a souhaité obtenir une traduction de qualité, mais ne peut alléguer, ni promettre, ni garantir l'exactitude, l'intégralité ou la qualité des informations contenues dans la version non-anglaise.

De plus, Milnor n'a pas cherché à vérifier les informations contenues dans la version non-anglaise, celle-ci ayant été entièrement réalisée par une tierce partie. En conséquence, Milnor dénie expressément toute responsabilité en ce qui concerne les erreurs de substance ou de forme et n'assume aucune responsabilité quand à la fiabilité de l'usage des informations contenues dans la version non-anglaise, ou aux conséquences de cet usage.

**En aucune circonstance, Milnor, ses représentants ou ses administrateurs, ne seront tenus pour responsables de tout dommage direct, indirect, accidentel, répressif ou conséquent pouvant résulter, de quelque façon que ce soit, de l'usage de la version non-anglaise de ce manuel ou de l'impossibilité de l'utiliser ou de sa fiabilité ou résultant de fautes, d'omissions ou d'erreurs dans la traduction.**

**Lire le manuel de sécurité**

**Produits applicables de Milnor® par numéro de type: [Applicable Milnor®  
products by model number:]**

30015T5X	30015V7J	30022H8J	30022T5X	30022V6J	30022VRJ	30022X8J
36021V5J	36021V7J	36026V5J	36026V7J	36026X8J	42026V6J	42026X7J
42030V6J	42032X7J	48040F7B	48040F7J	MWR12J5	MWR12X5	MWR16J5
MWR16X5	MWR18J4	MWR18J6	MWR18X4			

# Table des Matières [English table of contents follows]

Sections	Illustrations, Tableaux, et Suppléments
<b>Chapitre 1. Description des commandes</b>	
<b>1.1. Commandes de l'opérateur sur les modèles E-P Plus® et E-P Express®</b> (Document BICJHF01)	Illustration 1: Panneau de commande classique
<b>Chapitre 2. Fonctionnement normal</b>	
<b>2.1. Fonctionnement normal de la machine</b> (Document BICJVO03)	
2.1.1. Consignes de sécurité élémentaires	
2.1.2. Vérification des paramètres des interrupteurs	Supplément 1: Délai de sécurité avant la mise sous tension
2.1.3. Chargement de la machine	
2.1.4. Sélection et lancement d'un programme	
2.1.5. Surveillance du fonctionnement	
2.1.6. Comment arrêter un programme lancé	
2.1.7. Comment redémarrer après une panne de courant	
2.1.8. Déchargement de la machine	
<b>Chapitre 3. Correction des erreurs</b>	
<b>3.1. Messages d'erreur en conditions de fonctionnement normal</b> (Document BICJHT04)	

# Table of Contents

Sections	Figures, Tables, and Supplements
<b>Chapter 1. Description of Controls</b>	
<b>1.1. Operator Controls on E-P Plus® and E-P Express® Models</b> (Document BICJHF01)	Figure 1: Typical Control Panel
<b>Chapter 2. Normal Operation</b>	
<b>2.1. Normal Machine Operation</b> (Document BICJVO03)	
2.1.1. Start Here for Safety	
2.1.2. Check Switch Settings	Supplement 1: The Power-up Safety Delay
2.1.3. Load the Machine	
2.1.4. Select and Start a Formula	
2.1.5. Monitor Operation	
2.1.6. How to Terminate a Running Formula	
2.1.7. How to Restart after Losing Power	
2.1.8. Unload the Machine	
<b>Chapter 3. Correcting Errors</b>	
<b>3.1. Error Messages During Normal Operation</b> (Document BICJHT04)	

# Chapitre 1

## Description des commandes

# Chapter 1

## Description of Controls

BICJHF01 (Published) Book specs- Dates: 20090831 / 20090831 / 20091001 Lang: FRE01 Applic: CJV CJH CJF CJX

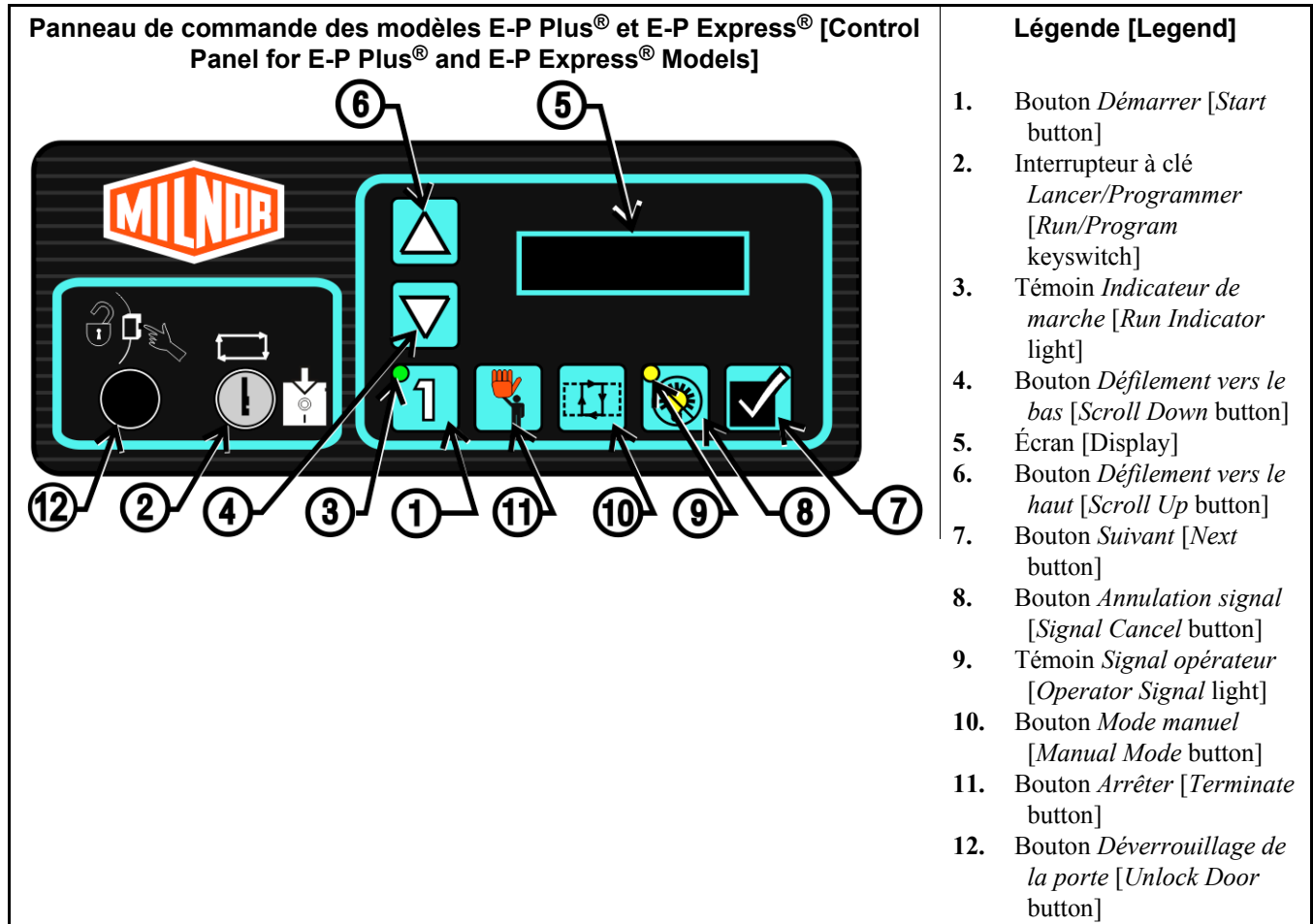
### 1.1. **Commandes de l'opérateur sur les modèles E-P Plus<sup>®</sup> et E-P Express<sup>®</sup>**

Le présent document décrit les commandes utilisateur utilisées lorsque la machine fonctionne normalement. Pour obtenir des informations complémentaires sur d'autres commandes illustrées [Illustration 1](#), reportez-vous au manuel de référence.

### **Operator Controls on E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Models**

This document describes the user controls during normal machine operation. For additional information on other controls shown in [Figure 1](#), see the reference manual.

Illustration [Figure] 1: Panneau de commande classique [Typical Control Panel]



**Affichage ou action [Display or Action]**

**Explication**

**Explanation**

① Lorsque l'écran indique *Lancer le programme*, appuyez sur ce bouton pour démarrer le programme.

When the display says *Run Formula*, press this button to start the formula.



En conditions de fonctionnement normal, l'interrupteur à clé *Lancer/Programmer* doit être réglé sur ☐. Il s'agit de la position automatique.

During normal operation, the *Run/Program* keyswitch must be set to ☐. This is the automatic position.



Les boutons *Défilement vers le haut* et *Défilement vers le bas* permettent de sélectionner le programme désiré.





Use the *Scroll Up* and *Scroll Down* buttons to select the desired formula.



Le bouton *Suivant* n'est pas utilisé en conditions de fonctionnement normal.

The *Next* button is not used during normal operation.

**Affichage ou action**  
[Display or Action]

Explication	Explanation
 Le bouton <i>Annulation signal</i> désactive le signal opérateur qui retentit lorsqu'un programme s'est terminé normalement. De même, si un signal opérateur est programmé avec l'injection de la lessive, ajoutez la lessive et appuyez sur ce bouton pour reprendre l'opération.	The <i>Signal Cancel</i> button silences the operator signal that sounds when a formula completes normally. Also, if an operator signal is programmed with a chemical injection, add the chemical and press this button to resume operation.
 Le bouton <i>Manuel</i> n'est pas utilisé en conditions de fonctionnement normal.	The <i>Manual</i> button is not used during normal operation.
 Le bouton <i>Arrêter</i> annule toutes les étapes restantes du programme en cours et lance la procédure d'arrêt de la machine. Le programme ne pourra pas reprendre.	The <i>Terminate</i> button cancels all remaining steps in the current formula and starts the shutdown procedure for the machine. The formula can not be resumed.
 Le bouton <i>Déverrouillage de la porte</i> sert à ouvrir la porte lorsque toutes les autres conditions de sécurité sont réunies.	The <i>Unlock Door</i> button allows you to open the door if all other safety conditions are met.

— Fin BICJHF01 —

— End of BICJHF01 —

## Chapitre 2

# Fonctionnement normal

## Chapter 2

# Normal Operation

BICJVO03 (Published) Book specs- Dates: 20090831 / 20090831 / 20091001 Lang: FRE01 Applic: CJV CJH CJF CJX

### 2.1. Fonctionnement normal de la machine

### Normal Machine Operation

#### 2.1.1. Consignes de sécurité élémentaires

#### Start Here for Safety

Le présent document est destiné à rappeler les exigences de fonctionnement de la laveuse-essoreuse à la personne qui la fait fonctionner. N'essayez pas d'utiliser cette machine avant qu'un opérateur entraîné vous en ait expliqué les détails.

This document is designed to remind the person operating this washer-extractor what is required to operate this machine. Do not attempt to operate this machine before a trained operator has explained the details to you.



**DANGER [1]: Risques multiples**—Toute opération effectuée par l'opérateur sans précaution peut tuer ou blesser le personnel, endommager ou détruire la machine, endommager l'installation et/ou annuler la garantie.

**DANGER [1]: Multiple Hazards**—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.



**ATTENTION [2]: Risques d'électrocution et de brûlure électrique**—Tout contact avec le courant électrique peut entraîner la mort ou des blessures graves. Du courant électrique est présent à l'intérieur de l'armoire tant que le disjoncteur principal de l'alimentation de la machine n'est pas activé. Ne pas déverrouiller ou ouvrir les portes des boîtiers électriques.

**CAUTION [2]: Electrocution and Electrical Burn Hazards**—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Ne pas déverrouiller ou ouvrir les portes des boîtiers électriques.
- Vous devez connaître l'emplacement du disjoncteur principal et l'utiliser en cas d'urgence pour couper le courant de la machine.








- Do not unlock or open electric box doors.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and



- La maintenance doit être exclusivement assurée par des techniciens qualifiés et agréés. Il est impératif de bien connaître les dangers encourus et la manière de les éviter.

how to avoid them.

## 2.1.2. Vérification des paramètres des interrupteurs Check Switch Settings

Affichage ou action [Display or Action]	Explication	Explanation
	Vérifiez que l'interrupteur à clé <i>Lancer/Programmer</i> est réglé sur  .	Check that the <i>run/program</i> keyswitch is at  .
	Vérifiez que les interrupteurs <i>Arrêt d'urgence</i> sont en position <i>Sortie</i> .	Check that any <i>emergency stop</i> switches are in the <i>out</i> position.
	Vérifiez que l'interrupteur principal, lorsqu'il en existe un, est réglé sur  .	Check that the master switch, if provided, is at  .

### Supplément 1

#### Délai de sécurité avant la mise sous tension

Certaines laveuses-essoreuses Milnor® ne comportent pas de capteur de vitesse vérifiant que le panier s'est arrêté de tourner. C'est pourquoi, lorsque vous mettez la machine sous tension pour la première fois, 80 secondes au moins s'écoulent avant que vous ne puissiez réaliser une opération. Cela laisse le temps au panier de s'arrêter complètement de tourner si l'électricité a été coupée alors que la machine était en phase d'essorage à grande vitesse puis est revenue avant que le panier ne soit arrêté.

### Supplement 1

#### The Power-up Safety Delay

Some Milnor® washer extractors do not use a speed sensing device to verify that the basket has stopped rotating. Therefore, when power is first applied to the machine, at least 80 seconds must elapse before any further operations can be attempted. This provides sufficient time for the basket to coast to a complete stop if power was lost while the machine was in a high speed extract and restored before the basket stopped.

## 2.1.3. Chargement de la machine

Chargez la machine à sa capacité nominale et fermez hermétiquement la porte de chargement.

## Load the Machine

Load the machine to the rated capacity and securely close the loading door.

## 2.1.4. Sélection et lancement d'un programme

## Select and Start a Formula

### Affichage ou action [Display or Action]

LANCER LE PROGRAMME  
00 MISE HORS TENSION  
OK

RUN FORMULA  
00 OK TO POWER OFF



LANCER LE PROGRAMME  
07 PROGRAMME NUMÉRO  
07

RUN FORMULA  
07 FORMULA NUMBER 07



LANCER LE PROGRAMME  
N'EXISTE PAS

RUN FORMULA  
DOES NOT EXIST

### Explication

Ceci est l'écran *Lancer le programme*. Il vous permet de mettre la machine hors tension sans risquer d'endommager les pièces électroniques ou de sélectionner le programme à lancer.

vous permet de parcourir la liste des 30 programmes.

Écran de l'exemple : le *Programme 07* est sélectionné pour être lancé.

lance la machine avec le programme sélectionné.

indique que le programme sélectionné pour être lancé n'a pas été programmé. Cet écran s'affiche pendant trois secondes.

### Explanation

This is the *Run Formula* display. From this display, you can disconnect power from the machine without risking damage to electronic parts, or you can select a formula to run.

indexes forward/backward through the 30 formulas.

Example display: *Formula 07* selected for running

starts the machine with the selected formula.

indicates that the formula selected for running has not been programmed. This display appears for three seconds.

## 2.1.5. Surveillance du fonctionnement Monitor Operation

Affichage ou action [Display or Action]	Explication	Explanation
<div style="border: 1px solid black; padding: 2px;">23:04 F02S01 02:37 TEMP A168/D170 NIV 1</div> <div style="border: 1px solid black; padding: 2px;">23:04 F02S01 02:37 TEMP A168/D170 LEV 1</div>	<p>Ces deux écrans alternent en conditions de fonctionnement normal sur certains modèles E-P Plus®. Les modèles E-P Express® affichent d'autres données sur l'étape en cours, mais pas sur la température de l'eau de trempage.</p>	<p>These two displays alternate during normal operation on some E-P Plus® models. E-P Express® models display other data about the step, but not bath temperature data.</p>
<div style="border: 1px solid black; padding: 2px;">23:04 ÉTAPE 01 02:37 TEMP A168/D170 VIT 0</div> <div style="border: 1px solid black; padding: 2px;">23:04 STEP 01 02:37 TEMP A168/D170 SPD 0</div>	<p>ÉTAPE 01 est l'étape en cours.</p>	<p>STEP01 is the current step.</p>
<div style="border: 1px solid black; padding: 2px;">23:04 F02S01 02:37</div> <div style="border: 1px solid black; padding: 2px;">23:04 F02S01 02:37</div>	<p>ESSORAGE indique que la machine est en train d'essorer le linge.</p>	<p>EXTRACT indicates that the machine is extracting the goods.</p>
<div style="border: 1px solid black; padding: 2px;">23:04 F02S01 02:37</div>	<p>ARRÊT TEMPS indique que le minuteur s'est arrêté pour l'injection de lessive. Le matériel de fourniture de lessive doit être correctement installé pour que cette fonction marche.</p>	<p>TIMEHALT indicates that the timer is stopped for a chemical injection. The chemical supply equipment must be properly installed for this feature to work.</p>
<div style="border: 1px solid black; padding: 2px;">TEMP A168/D170 NIV 1</div> <div style="border: 1px solid black; padding: 2px;">TEMP A168/D170 LEV 1</div>	<p>La température de cette machine E-P Plus® est mesurée en degrés Fahrenheit ou Celsius, selon la configuration choisie.</p>	<p>Temperature in this E-P Plus® machine is measured in degrees Fahrenheit or Celsius, according to machine configuration.</p>
	<p>A168 indique que la température actuellement atteinte est de 168 degrés. La température s'affiche uniquement si la machine est équipée du contrôle de la température et que ce contrôle a été configuré.</p>	<p>A168 indicates that the current achieved temperature is 168 degrees. Temperature is displayed only if machine is equipped with and configured for temperature control.</p>

**Affichage ou action**  
[Display or Action]

VIT 0	NIV 2
-------	-------

SPD 0	LEV 2
-------	-------

**Explication**

D170 indique que la température voulue pour cette étape est de 170 degrés. La température s'affiche uniquement si la machine est équipée du contrôle de la température et que ce contrôle a été configuré.

NIV 2 indique que le niveau d'eau atteint est le Niveau 2.

VIT 0 indique la vitesse de trempage à cette étape.

ATTENTE NIVEAU 2 C indique que le Niveau 2 est programmé pour cette étape mais qu'il n'a pas encore été atteint. Le C indique que le robinet d'eau chaude est ouvert ; un F indique que c'est le robinet d'eau froide et un 3 indique que de l'eau est ajoutée.

LESSIVE 03 est affiché lorsque la lessive 03 est injectée. Le numéro de chaque lessive (jusqu'à cinq lessives peuvent être reliées) s'affiche au moment de l'injection de la lessive.

ESSORAGE FINAL indique que l'étape en cours est l'étape finale du programme de lavage.

**Explanation**

D170 indicates that the desired temperature for this step is 170 degrees. Temperature is displayed only if the machine is equipped with and configured for temperature control.

LEV 2 indicates that the bath level achieved is Level 2.

SPD 0 indicates the bath speed for this step.

WAIT FOR LEVEL 2 H indicates that Level 2 is programmed for this step, but is not yet achieved. The H indicates that the hot water valve is open; C indicates cold water, and 3 indicates extra water.

CHEM 03 is displayed when Chemical 03 is being injected. The number for each chemical (up to five may be connected) is displayed as the chemical is injected.

FINAL EXTRACT indicates that the step in progress is the final step of the wash formula.

**2.1.6. Comment arrêter un programme lancé**

**How to Terminate a Running Formula**

**Affichage ou action**  
[Display or Action]



**Explication**

annule le programme en cours et réinitialise la machine sur l'écran *Lancer le programme* (voir Section 2.1.4 "Sélection et lancement d'un programme").

**Explanation**

Cancels the current formula and returns the machine to the *Run Formula* display (see Section 2.1.4 "Select and Start a Formula").

### 2.1.7. Comment redémarrer après une panne de courant

En cas de panne de courant ou si la boîte de coupure murale est mise hors tension alors que la machine fonctionne en mode automatique, le panneau de commande se souvient du programme et de l'étape qu'il était en train de réaliser.

**Affichage ou action**  
[Display or Action]

APPUYER SUR DÉMARRER  
POUR LANCER  
ÉTAPE xx - PROGRAMME  
yy

PRESS START TO RUN  
STEP xx - FORMULA yy

### How to Restart after Losing Power

The control remembers the formula and step it was executing if power fails or if the wall disconnect is turned off while the machine is operating in automatic mode.

**Explication**

Sur la plupart des modèles de machine, cet écran apparaît lorsque le courant est rétabli. Le programme et l'étape qui étaient en cours au moment de la coupure sont indiqués.

**Explanation**

On most machine models, this display appears when power is restored. The formula and step which were in progress when power was interrupted are shown.

1

relance la machine avec le programme et à l'étape affichés. Si la coupure s'est produite à une étape de trempage, le niveau et la température (s'ils ont été commandés) doivent à nouveau être atteints, même s'ils l'étaient déjà avant la coupure de courant. Si une lessive était commandée, elle sera réinjectée.

Resumes the formula at the displayed formula and step. If the outage occurred in a bath step, level and temperature (if commanded) must again be satisfied, even if these were already satisfied before power was lost. Any commanded chemicals will be injected again.

Si la coupure s'est produite pendant la phase de vidange d'une étape de trempage, cette étape recommence avant de passer à l'étape suivante.

If the outage occurred during the drain part of a bath step, the bath step will be repeated, then followed by the next commanded step.

Si la coupure s'est produite pendant une étape d'essorage, le trempage précédent recommence avant que l'étape d'essorage ne soit lancée.

If the outage occurred during an extract step, the previous bath will be repeated before the extract step begins.

### 2.1.8. Déchargement de la machine



**DANGER 3: Risques d'entraînement et risques sérieux**—Le contact avec du linge en traitement peut entraîner l'enroulement du linge autour de votre corps ou de vos membres et vous démembrer. Le linge est normalement protégé par le verrouillage de la porte du tambour.

- Ne pas toucher au linge se trouvant à l'intérieur ou dépassant du tambour en

### Unload the Machine

**DANGER 3: Entangle and Sever Hazards**—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember you. The goods are normally isolated by the locked cylinder door.

- Do not touch goods inside or hanging partially outside the turning cylinder.

rotation.

Lorsque le programme est terminé ou arrêté, le cylindre continue à tourner pendant 25 secondes si la dernière étape était un trempage. Si la dernière étape était un essorage, le temps pendant lequel le cylindre continue à tourner peut être de 180 secondes. N'essayez pas d'ouvrir la porte trop tôt.

When the formula ends or is terminated, the cylinder coasts for 25 seconds if the last step was a bath step. If the last step was an extract, the coast time may be as much as 180 seconds. Do not attempt to open the door early.

**Affichage ou action**  
[Display or Action]

DÉVERROUILLAGE DE LA  
PORTE  
VEUILLEZ PATIENTER

UNLOCKING THE DOOR  
PLEASE WAIT

DÉCHARGEMENT EN  
ATTENTE

WAITING TO UNLOAD



**Explication**

s'affichent pendant les 15 dernières seconde pendant lesquelles le panier continue à tourner, ou pendant toute la durée de cette rotation si le programme a été arrêté manuellement.

À la fin du temps pendant lequel le panier continue à tourner, l'alarme opérateur retentit.

désactive l'alarme opérateur. La porte se déverrouille pour vous permettre de décharger la machine.

**Explanation**

display during the last 15 seconds of coast, or during the entire coast time if the formula was manually terminated.

At the end of the coast time, the operator alarm sounds.

Silences the operator alarm. The door unlocks so you can unload the machine.

## Chapitre 3

# Correction des erreurs

## Chapter 3

# Correcting Errors

BICJHT04 (Published) Book specs- Dates: 20090831 / 20090831 / 20091001 Lang: FRE01 Applic: CJV CJH CJF CJX

### 3.1. Messages d'erreur en conditions de fonctionnement normal

Si un message d'erreur apparaît sur la ligne inférieure de l'écran alors que la machine fonctionne, le minuteur affiché sur la ligne supérieure s'arrête. Une fois l'erreur corrigée, le minuteur reprend. Pour corriger la plupart des erreurs, interrompez le programme en cours et mettez la machine hors tension. N'arrêtez pas le programme si vous souhaitez le reprendre une fois l'erreur corrigée. Pour en savoir plus, reportez-vous au manuel de référence.

### Error Messages During Normal Operation

If an error message appears on the bottom line of the display while the machine is running, the timer shown on the top line will stop counting. When the error is corrected, the timer resumes counting down. To troubleshoot most errors, suspend the formula in progress and turn power off. Do not terminate the formula if it is to be resumed after the error is corrected. See the reference manual for more information.

**Affichage ou action**  
[Display or Action]

NIVEAUX EN COURS

LEVELS STILL MADE

REEMPLISSAGE TROP LONG

TOO LONG TO FILL

CHAUFFE TROP LONGUE

TOO LONG TO STEAM

**Explication**

Le microprocesseur continue de recevoir des informations indiquant qu'un niveau est en cours juste avant ou pendant une étape d'essorage ou juste avant le remplissage pour une étape de trempage. Cette erreur est automatiquement corrigée une fois le niveau perdu.

Le temps de remplissage jusqu'au niveau a dépassé 10 minutes. Vérifiez les robinets de débit d'eau, les crépines, les conduites d'alimentation et la pression de l'eau. La machine continuera à se remplir jusqu'à ce que le niveau soit atteint ; l'erreur s'effacera alors automatiquement et la machine fonctionnera de nouveau normalement.

**Uniquement pour les modèles E-P Plus.** Le temps maximal configuré pour que l'eau atteigne la température voulue a été dépassé. Vérifiez le robinet du circuit de vapeur, la crépine, le collecteur de la conduite principale de vapeur et la pression, etc. L'eau continuera de chauffer jusqu'à ce que la température soit atteinte ; l'erreur s'effacera alors automatiquement et la machine fonctionnera de nouveau normalement.

**Explanation**

The microprocessor is still receiving information that a level is made just before or during an extract step, or immediately before the fill for a bath step. This error is self-clearing when level is lost.

Time to fill to level exceeded 10 minutes. Check the water valves, strainers, supply lines, and water pressure. The machine will continue to fill until level is reached, at which time the error will automatically clear and normal operation will resume.

**E-P Plus models only.** The configured maximum time to steam up to the desired temperature has been exceeded. Check the steam valve, strainer, main steam header and pressure, etc. Steaming will continue until temperature is achieved, when the error will automatically clear and normal operation will resume.



**Affichage ou action**  
[Display or Action]

REFROIDISSEMENT TROP  
LONG

TOO LONG TO COOL

**Explication**

**Uniquement pour les modèles E-P Plus.** Le temps maximal configuré pour le refroidissement à la température voulue a été dépassé. Vérifiez le robinet de refroidissement et la crépine, lorsqu'il en existe une, la pression de l'eau et la position du robinet du vernier au niveau de l'admission d'eau de refroidissement. Le refroidissement se poursuivra jusqu'à ce que la température voulue soit atteinte ; l'erreur s'effacera alors automatiquement.

**Explanation**

**E-P Plus models only.** The configured maximum time to cool down to the desired temperature has been exceeded. Check the cooldown valve and strainer if equipped, cold water pressure, and position of vernier valve on cooldown inlet. Cooldown will continue until the desired temperature is achieved, when the error will automatically clear.

VIDANGE TROP LONGUE

TOO LONG TO DRAIN

La machine ne s'est pas correctement vidangée pendant le temps de vidange alloué. Cette erreur autocorrective s'effacera une fois le niveau d'eau dans le panier suffisamment bas pour que l'opération suivante puisse commencer.

The machine did not drain properly in the allotted drain time. This self-correcting error will clear when the water level in the basket is low enough to begin the next operation.

VÉRIFIER LA SONDÉ

CHECK PROBE

**Uniquement pour les modèles E-P Plus.** Ce message d'erreur indique que la résistance de la sonde de température est en dehors de la plage spécifiée. Testez la sonde en débranchant ses fils de la carte processeur et en mesurant la résistance avec un ohmmètre numérique adéquat. La résistance entre les deux fils doit être comprise entre 2 et 35 KOhms. La résistance entre chaque fil et la terre doit être infinie.

**E-P Plus models only.** This error message indicates that the resistance of the temperature probe is outside the specified range. Test the probe by disconnecting the probe leads from the processor board and checking the resistance with an accurate digital ohmmeter. Resistance between the two leads must be between 2K and 35K Ohms. Resistance between each lead and ground must be infinite.

**Affichage ou action**  
[Display or Action]

PROBLÈME EXTERNE
EXTERNAL FAULT

**Explication**

Sur la plupart des machines, cette erreur indique que l'injection de lessive programmée a échoué, généralement parce que le système de fourniture de lessive est vide. Une fois la lessive ajoutée, elle peut être injectée ; l'erreur s'efface alors automatiquement et le fonctionnement reprend.

**Explanation**

On most machines, this error indicates that the programmed chemical injection failed, usually because the chemical supply system is empty. When chemicals are added and can be injected, this error clears automatically, allowing operation to resume.

Sur les modèles 48040F7J/F7B, cette erreur indique que la pression d'air de la crapaudine est inférieure à la pression minimale requise afin de favoriser la protection de la crapaudine contre l'eau.

On 48040F7J/F7B models, this error indicates that the bearing air pressure is below the minimum required to help protect the bearing from water contamination.

PROBLÈME : FREIN . ACTIONNÉ
BRAKE PRESS . FAULT

Cette erreur apparaît uniquement sur les modèles de machine équipés d'un frein à cylindre. Cette erreur se produit généralement lorsque la machine ne reçoit pas suffisamment de pression d'air pour désenclencher le frein normalement fermé. Vérifiez l'alimentation en air comprimé de l'usine.

This error appears only on machine models equipped with a cylinder brake. The message indicates that the brake is engaged when it should be disengaged. This is usually because the machine is not receiving sufficient air pressure to open the normally-closed brake. Check the plant compressed air supply.

RELAIS TRIFILAIRE ÉTEINT
THREE WIRE DISABLED

Le relais trifilaire s'est éteint. Ce relais fournit l'alimentation du circuit de contrôle à la machine. Une fois allumé en appuyant momentanément sur le bouton *Démarrer* (1), il est maintenu sous tension par ses contacts, ainsi que par les surcharges du moteur, les verrouillages de la porte, etc. Lorsque l'un des contacts s'ouvre, même brièvement, la machine s'arrête et cet écran apparaît. Cette erreur ne peut être effacée qu'en appuyant sur le bouton *Démarrer* (1), et uniquement si elle a été corrigée.

The three-wire relay de-energized. This relay provides control circuit power to the machine. Once energized by momentarily depressing the *Start* button (1), it is held energized by its own normally open contacts, along with motor overloads, door interlocks, etc. Should any of these contacts open even momentarily, the machine stops and this display appears. This error can only be cleared by depressing the *Start* button (1), and only then if the error has been cleared.

**Affichage ou action**  
[Display or Action]

DÉFAILLANCE DE  
L'ONDULEUR

INVERTER FAULT

INTERRUPTEUR DE VIB.  
DÉCLENCHÉ  
SÉQUENCE DE  
RÉCUPÉRATION

VIBRATION SW TRIPPED  
RECOVERY SEQUENCE

**Explication**

Ce message d'erreur apparaît si le microprocesseur ne reçoit pas d'alimentation à partir de l'onduleur 14 secondes après le début du programme. Si 14 secondes s'écoulent sans alimentation de la part de l'onduleur, le minuteur s'arrête, le panier se fige et le robinet de vidange s'ouvre. Pour reprendre, appuyez sur la touche *Suivant* (☑).

Lorsque l'interrupteur de vibration se ferme, le minuteur s'arrête. Après 45 à 85 secondes (120 secondes sur les modèles 42032F7J), le panier se remet à tourner en vitesse de lavage au fur et à mesure que le cylindre se remplit d'eau. Une fois le niveau bas atteint, le cylindre reste en vitesse de lavage pendant une minute supplémentaire, puis accélère jusqu'à la vitesse d'essorage.

**Explanation**

This error message appears if the microprocessor does not receive an input from the inverter within 14 seconds of the beginning of the formula. After 14 seconds without an inverter input, the timer stops, the basket is stationary, and the drain valve opens. To recover, press the *Next* key (☑).

When the vibration switch closes, the timer stops. After 45 to 85 seconds (120 seconds on 42032F7J models), the basket reverses at wash speed as the cylinder fills with water. When low level is achieved, the cylinder reverses for one additional minute at wash speed, then accelerates to extract speed.

— Fin BICJHT04 —

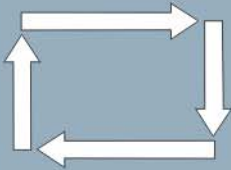
— End of BICJHT04 —



**Section**  
**Nederlands**

**5**





Published Manual Number: MQCJVO01NL

- Specified Date: 20090831
- As-of Date: 20090831
- Access Date: 20100607
- Depth: Detail
- Custom: n/a
- Applicability: CJV CJH CJF CJX
- Language Code: DUT01, Purpose: publication, Format: 2colA

## Gebruikershandleiding [Operator Guide]—

# Was-/extractiemachinemodellen met E-P Plus<sup>®</sup> en E-P Express<sup>®</sup> bedieningselementen [Washer-extractor Models with E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Controls]

**WARRSCHUWING:** De in deze handleiding opgenomen informatie is door Pellerin Milnor Corporation **alleen in het Engels** voorzien. Milnor heeft getracht een vertaling van goede kwaliteit te verkrijgen, maar maakt geen claims, doet geen beloften en biedt geen garanties betreffende de nauwkeurigheid, volledigheid of adequaatheid van de in de niet-Engelse versie opgenomen informatie.

Bovendien heeft Milnor geen enkele poging gedaan de in de niet-Engelse versie opgenomen informatie te controleren, aangezien dit geheel door derden is gedaan. Om deze redenen wijst Milnor uitdrukkelijk elke aansprakelijkheid voor fouten wat betreft inhoud of vorm af en neemt zij geen enkele verantwoordelijkheid op zich voor vertrouwen op, of gevolgen van, het gebruik van de informatie in de niet-Engelse versie.

**Milnor, of diens lasthebbers of functionarissen, zijn in geen enkel geval aansprakelijk voor directe, indirecte, incidentele of strafrechtelijke schade of gevolgschade die op welke wijze dan ook het gevolg is van het gebruik van, of onvermogen tot gebruik van, of vertrouwen op, de niet-Engelse versie van deze handleiding, of die het gevolg is van fouten, weglatingen of vergissingen in de vertaling.**

[Lees de veiligheidshandleiding](#)

**Toepasselijk Milnor® producten op modelnummer: [Applicable Milnor®  
products by model number:]**

30015T5X	30015V7J	30022H8J	30022T5X	30022V6J	30022VRJ	30022X8J
36021V5J	36021V7J	36026V5J	36026V7J	36026X8J	42026V6J	42026X7J
42030V6J	42032X7J	48040F7B	48040F7J	MWR12J5	MWR12X5	MWR16J5
MWR16X5	MWR18J4	MWR18J6	MWR18X4			



# Inhoudsopgave [English table of contents follows]

## Secties

## Afbeeldingen, tabellen en supplementen

### Hoofdstuk 1. Beschrijving van de besturing

#### 1.1. Bedieningselementen op de modellen E-P Plus® en E-P Express® (Document BICJHF01)

Afbeelding 1: Typisch controle paneel

### Hoofdstuk 2. Normaal bedrijf

#### 2.1. Normale machinefunctie (Document BICJVO03)

- 2.1.1. Start hier voor veiligheid
- 2.1.2. Test de schakelaar instellingen.
- 2.1.3. Laad de machine
- 2.1.4. Selecteer een wasprogramma en start de machine
- 2.1.5. Controle werking
- 2.1.6. Hoe een wasprogramma te beëindigen.
- 2.1.7. Hoe starten als de spanning was uitgevallen.
- 2.1.8. Ontlaad de machine

Supplement 1: Veiligheidsvertraging bij starten

### Hoofdstuk 3. Herstellen fouten

#### 3.1. Foutmelding gedurende normaal bedrijf (Document BICJHT04)

# Table of Contents

Sections	Figures, Tables, and Supplements
<b>Chapter 1. Description of Controls</b>	
<b>1.1. Operator Controls on E-P Plus® and E-P Express® Models</b> (Document BICJHF01)	Figure 1: Typical Control Panel
<b>Chapter 2. Normal Operation</b>	
<b>2.1. Normal Machine Operation</b> (Document BICJVO03)	
2.1.1. Start Here for Safety	
2.1.2. Check Switch Settings	Supplement 1: The Power-up Safety Delay
2.1.3. Load the Machine	
2.1.4. Select and Start a Formula	
2.1.5. Monitor Operation	
2.1.6. How to Terminate a Running Formula	
2.1.7. How to Restart after Losing Power	
2.1.8. Unload the Machine	
<b>Chapter 3. Correcting Errors</b>	
<b>3.1. Error Messages During Normal Operation</b> (Document BICJHT04)	

# Hoofdstuk 1

## Beschrijving van de besturing

# Chapter 1

## Description of Controls

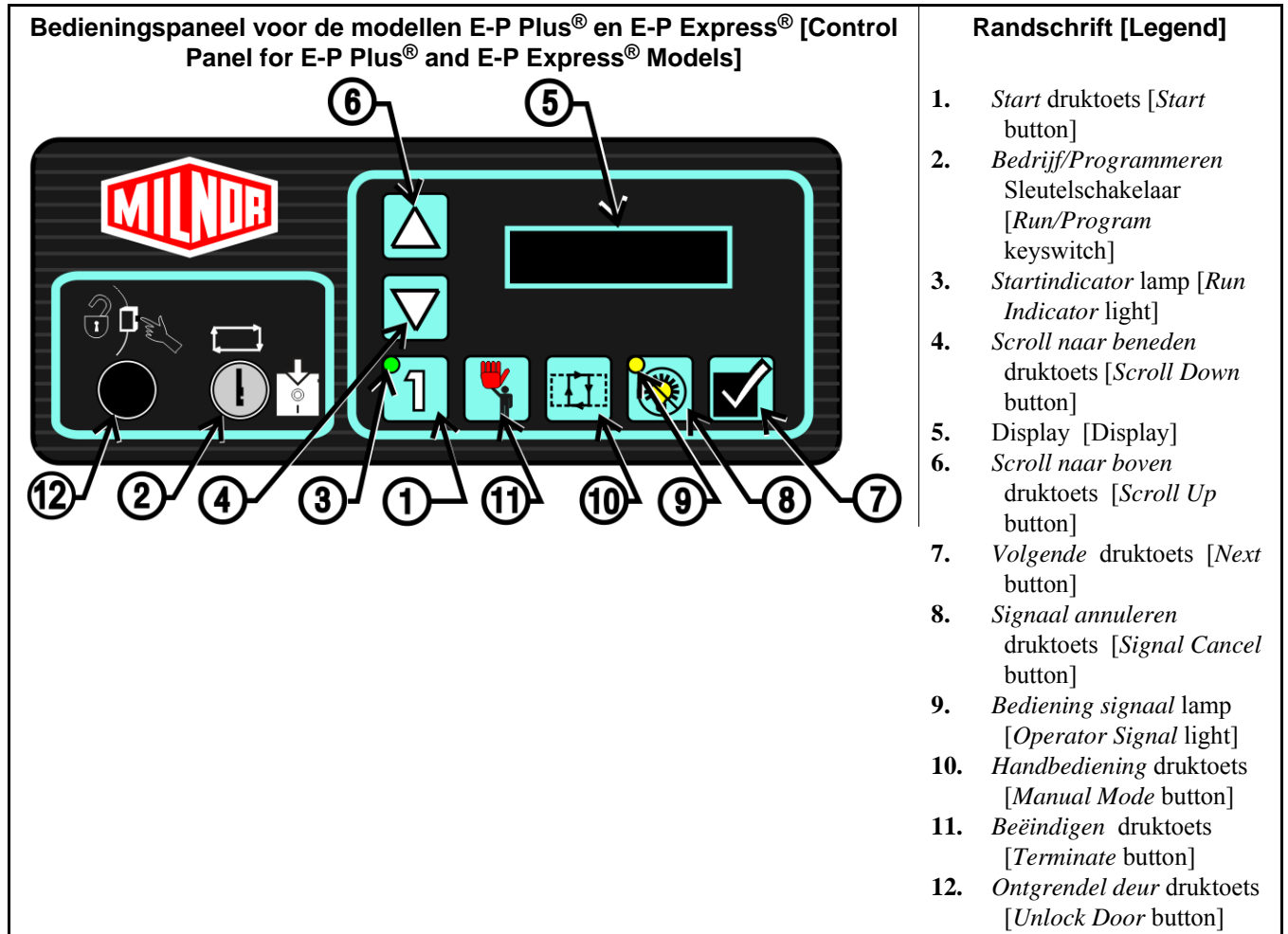
BICJHF01 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: DUT01 Applic: CJV CJH CJF CJX

- 1.1. Bedieningselementen op de modellen E-P Plus<sup>®</sup> en E-P Express<sup>®</sup>**
- Dit document beschrijft de gebruikersbesturing gedurende normaal machinebedrijf voor aanvullende informatie op onderbesturing (zie referentie instructieboek)

### **Operator Controls on E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Models**

This document describes the user controls during normal machine operation. For additional information on other controls shown in [Figure 1](#), see the reference manual.

Afbeelding [Figure] 1: Typisch controle paneel [Typical Control Panel]







**Weergave of handeling**  
[Display or Action]

**Uitleg**

**Explanation**

<p>①</p>	<p>Wanneer de display meldt <i>Start wasproces</i>. druk deze knop in om het wasproces te starten.</p>	<p>When the display says <i>Run Formula</i>, press this button to start the formula.</p>
<p>☐ / ☒</p>	<p>Gedurende normale operatie, de <i>Bedrijf/Programmeren</i> sleutelschakelaar moet in (☐). Dit is de automatische stand.</p>	<p>During normal operation, the <i>Run/Program</i> keyswitch must be set to ☐. This is the automatic position.</p>
<p>▲ / ▼</p>	<p>Gebruik de <i>Scroll naar boven</i> en <i>Scroll naar beneden</i> knoppen om het gekozen programma te selecteren.</p>	<p>Use the <i>Scroll Up</i> and <i>Scroll Down</i> buttons to select the desired formula.</p>
<p>☑</p>	<p>De <i>Volgende</i> knop wordt niet gebruikt gedurende normaal bedrijf.</p>	<p>The <i>Next</i> button is not used during normal operation.</p>

Weergave of handeling [Display or Action]	Uitleg	Explanation
	De <i>Signaal annuleren</i> druktoets schakelt het signaal uit dat luidt als een wasprogramma klaar is. Ook wanneer dit signaal is geprogrammeerd met een zeepinjectie, voeg het middel toe en druk de drukknop in om het programma verder te laten gaan.	The <i>Signal Cancel</i> button silences the operator signal that sounds when a formula completes normally. Also, if an operator signal is programmed with a chemical injection, add the chemical and press this button to resume operation.
	De <i>Handbediending</i> knop wordt niet gebruikt gedurende normaal bedrijf.	The <i>Manual</i> button is not used during normal operation.
	De <i>Beëindigen</i> druktoets annuleert alle resterende stappen in het huidige programma en start de procedure om de machine te laten stoppen. Het programma kan niet opnieuw worden gestart.	The <i>Terminate</i> button cancels all remaining steps in the current formula and starts the shutdown procedure for the machine. The formula can not be resumed.
	De <i>Ontgrendel deur</i> druktoets geeft u de mogelijkheid tot het openen van de deur mits aan alle veiligheidscondities is volaan.	The <i>Unlock Door</i> button allows you to open the door if all other safety conditions are met.

— Einde BICJHF01 —

— End of BICJHF01 —

## Hoofdstuk 2

# Normaal bedrijf

## Chapter 2

# Normal Operation

BICJVO03 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: DUT01 Applic: CJV CJH CJF CJX

### 2.1. Normale machinefunctie

### Normal Machine Operation

#### 2.1.1. Start hier voor veiligheid

Dit document is ontwikkeld om de bedieningspersoon, die de wasmachine bedient te instrueren over hoe deze machine te bedienen. Ga niet met de machine werken voordat u instructie heeft gehad van een deskundige.

#### Start Here for Safety

This document is designed to remind the person operating this washer-extractor what is required to operate this machine. Do not attempt to operate this machine before a trained operator has explained the details to you.



**GEVAAR 1: Diverse Risico's** —Een onzorgvuldige manier van werken kan leiden tot ernstige beschadigingen aan de machine of omliggende installaties en eigendommen. Het kan leiden tot ernstige verwondingen van het bedienpersoneel met eventueel de dood tot gevolg. Door het verkeerd gebruik van de machine kan de garantie vervallen.

**DANGER 1: Multiple Hazards**— Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.



**WARSCHUWING 2: Elektrocutie en (Ver)Brandgevaar door elektriciteit**— Contact met elektrische spanning kan de dood of ernstig letsel tot gevolg hebben. In de machine is elektriciteitsspanning aanwezig, tenzij de hoofdvoeding van de machine is uitgeschakeld.

**CAUTION 2: Electrocutation and Electrical Burn Hazards**—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.








- Wees voorzichtig bij het openen van elektrische deuren met componenten.
- Zorg steeds dat uzelf de hoofdschakelaar uitzet voordat u aan de machine gaat werken en controleer met een goed meetinstrument of er nog spanning op de machine aanwezig is. Zorg ervoor dat niemand anders de hoofdschakelaar kan opzetten tijdens de werken.
- U mag alleen onderhoud aan de machine

- Do not unlock or open electric box doors.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and

uitvoeren als u hiervoor gekwalificeerd en bevoegd bent. U dient de risico's goed te begrijpen en te weten hoe u deze kunt voorkomen.

how to avoid them.

## 2.1.2. Test de schakelaar instellingen. Check Switch Settings

Weergave of handeling [Display or Action]	Uitleg	Explanation
	Test of de <i>Bedrijf/programmeren</i> sleutelschakelaar in de  positie staat.	Check that the <i>run/program</i> keyswitch is at  .
	Test of de <i>noodstop</i> schakelaar in de <i>Uit</i> positie staat.	Check that any <i>emergency stop</i> switches are in the <i>out</i> position.
	Test of de hoofdschakelaar, mits aanwezig, is op  .	Check that the master switch, if provided, is at  .

### Supplement 1

#### Veiligheidsvertraging bij starten

Sommige Milnor<sup>®</sup> was-/extractiemachines hebben geen snelheidsdetectievoorziening om te controleren of de mand tot stilstand is gekomen. In verband hiermee moeten na het moment dat de stroomtoevoer naar de machine is gestart ten minste 80 seconden verstrijken alvorens andere handelingen kunnen worden uitgevoerd. Dit zorgt ervoor dat voldoende tijd verstrijkt om de mand geheel tot stilstand te laten komen als de stroom uitvalt terwijl de machine bezig is met een extractie op hoge snelheid en de stroomtoevoer wordt hersteld voordat de mand tot stilstand is gekomen.

### Supplement 1

#### The Power-up Safety Delay

Some Milnor<sup>®</sup> washer extractors do not use a speed sensing device to verify that the basket has stopped rotating. Therefore, when power is first applied to the machine, at least 80 seconds must elapse before any further operations can be attempted. This provides sufficient time for the basket to coast to a complete stop if power was lost while the machine was in a high speed extract and restored before the basket stopped.

## 2.1.3. Laad de machine

Laad de machine tot de maximaal toelaatbare capaciteit en sluit de laaddeur.

## Load the Machine

Load the machine to the rated capacity and securely close the loading door.

## 2.1.4. Selecteer een wasprogramma en start de machine Select and Start a Formula

Weergave of handeling [Display or Action]	Uitleg	Explanation
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Start wasprogramma OO OK om machine uit te zetten</div> <div style="border: 1px solid black; padding: 2px;">RUN FORMULA OO OK TO POWER OFF</div>	Dit is de <i>Start programma</i> display. Van deze display kunt u de spanning van de machine uitzetten zonder risico tot beschadiging van elektronische onderdelen of u kunt een wasprogramma selecteren.	This is the <i>Run Formula</i> display. From this display, you can disconnect power from the machine without risking damage to electronic parts, or you can select a formula to run.
▲ / ▼	Index voouit/terug door de 30 wasprogramma's.	indexes forward/backward through the 30 formulas.
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Start programma 07 waprogramma nummer 07</div> <div style="border: 1px solid black; padding: 2px;">RUN FORMULA 07 FORMULA NUMBER 07</div>	Voorbeeld display <i>Wasprogramma 07</i> geselecteerd voor gebruik	Example display: <i>Formula 07</i> selected for running
1	Start de machine met het geselecteerde wasprogramma.	starts the machine with the selected formula.
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Start programma Bestaat niet</div> <div style="border: 1px solid black; padding: 2px;">RUN FORMULA DOES NOT EXIST</div>	Betekent dat het wasprogramma dat geselecteerd is, niet is geprogrammeerd. Dit bericht wordt 3 seconden getoond.	indicates that the formula selected for running has not been programmed. This display appears for three seconds.



## 2.1.5. Controle werking

## Monitor Operation

**Weergave of handeling**  
[Display or Action]

**Uitleg**

**Explanation**

```
23:04 F02S01 02:37
TEMP A168/P170 NIV 1
```

```
23:04 F02S01 02:37
TEMP A168/D170 LEV 1
```

```
23:04 STEP 01 02:37
TEMP A168/P170 SNE 0
```

```
23:04 STEP 01 02:37
TEMP A168/D170 SPD 0
```

```
23:04 P02S01 02:37
```

```
23:04 F02S01 02:37
```

Deze twee schermen wisselen elkaar tijdens normaal bedrijf af op sommige E-P Plus<sup>®</sup> modellen. Op E-P Express<sup>®</sup> modellen worden andere gegevens met betrekking tot de stap weergegeven, maar geen gegevens over de badtemperatuur.

These two displays alternate during normal operation on some E-P Plus<sup>®</sup> models. E-P Express<sup>®</sup> models display other data about the step, but not bath temperature data.

Stap01 is de huidige stap.

STEP01 is the current step.

Centrifugeren betekent dat de machine de goederen ontwaterd.

EXTRACT indicates that the machine is extracting the goods.

Stop de tijd betekent dat de tijd is gestopt voor een zeepdosering. Het zeepdoseersysteem moet juist geïnstalleerd zijn om de mogelijkheid te laten werken.

TIMEHALT indicates that the timer is stopped for a chemical injection. The chemical supply equipment must be properly installed for this feature to work.

```
TEMP A168/D170 LEV 1
```

```
TEMP A168/D170 LEV 1
```

De temperatuur in deze E-P Plus<sup>®</sup> machine wordt uitgedrukt in graden Fahrenheit of Celsius, afhankelijk van de configuratie van de machine.

Temperature in this E-P Plus<sup>®</sup> machine is measured in degrees Fahrenheit or Celsius, according to machine configuration.

A168 betekent dat de getoonde temperatuur 168 graden is. De temperatuur wordt alleen getoond wanneer de machine uitgevoerd is met de optie temperatuur controle.

A168 indicates that the current achieved temperature is 168 degrees. Temperature is displayed only if machine is equipped with and configured for temperature control.

Hoofdstuk 2. Normaal bedrijf

**Weergave of handeling**  
[Display or Action]

**Uitleg**

**Explanation**

D170 betekent dat de gewenste temperatuur 170 graden is voor deze stap. De temperatuur wordt alleen getoond wanneer de machine uitgevoerd is met de optie temperatuur controle.

D170 indicates that the desired temperature for this step is 170 degrees. Temperature is displayed only if the machine is equipped with and configured for temperature control.

Niveau 2 betekent dat het badniveau is geprogrammeerd voor niveau 2.

LEV 2 indicates that the bath level achieved is Level 2.

SNE 0
NIV 2

SNE 0 betekent dat dit de gekozen trommelsnelheid is voor deze stap.

SPD 0 indicates the bath speed for this step.

SPD 0	LEV 2
-------	-------

Wacht op niveau 24 betekent dat niveau 2 is geprogrammeerd voor deze stap, maar het niveau is nog niet bereikt. H betekent dat het heet water ventiel open is; K betekent koud water en 3 betekent extra water.

WAIT FOR LEVEL 2 H indicates that Level 2 is programmed for this step, but is not yet achieved. The H indicates that the hot water valve is open; C indicates cold water, and 3 indicates extra water.

Zeep 3 wordt getoond wanneer zeep 3 wordt gedoseerd. Het nummer voor elke zeep (maximaal 5 kunnen aangesloten worden) wordt getoond in het display.

CHEM 03 is displayed when Chemical 03 is being injected. The number for each chemical (up to five may be connected) is displayed as the chemical is injected.

Hoog centrifugeren betekent de stap in het wasproces dat dit de laatste stap in het programma is.

FINAL EXTRACT indicates that the step in progress is the final step of the wash formula.

### 2.1.6. Hoe een wasprogramma te beëindigen.

### How to Terminate a Running Formula

**Weergave of handeling**  
[Display or Action]

**Uitleg**

**Explanation**



Annuleer het huidige wasprogramma en zet de machine terug in de *Start programma* display (zie Sectie 2.1.4 “Selecteer een wasprogramma en start de machine”).

Cancels the current formula and returns the machine to the *Run Formula* display (see Section 2.1.4 “Select and Start a Formula”).

### 2.1.7. Hoe starten als de spanning was uitgevallen.

### How to Restart after Losing Power

De besturing herinnert in welke stap het programma stond als de stroom wegvalt of uitgezet wordt.

The control remembers the formula and step it was executing if power fails or if the wall disconnect is turned off while the machine is operating in automatic mode.

**Weergave of handeling**  
[Display or Action]

**Uitleg**

**Explanation**

Druk start om de machine te starten Stap XX - wasprogramma YY
PRESS START TO RUN STEP xx - FORMULA yy

Op de meeste machinetypes toont het display de informatie na opstarten. Het wasprogramma of stap wordt getoond voordat de machine stopt.

On most machine models, this display appears when power is restored. The formula and step which were in progress when power was interrupted are shown.



Het wasprogramma wordt behouden op de stap als getoond, na de stroomuitval start het programma in deze stap, wel moet opnieuw de waterstand en temperatuur bereikt worden. Ook de zeepdosering start opnieuw.

Resumes the formula at the displayed formula and step. If the outage occurred in a bath step, level and temperature (if commanded) must again be satisfied, even if these were already satisfied before power was lost. Any commanded chemicals will be injected again.

Als de stroomuitval gebeurt gedurende een uitlaatstap, dan wordt deze stap herhaald en dan volgt de volgende stap.

If the outage occurred during the drain part of a bath step, the bath step will be repeated, then followed by the next commanded step.

Als de stroomuitval gebeurt tijdens een centrifugestap, dan begint de stap voor het centrifugeren opnieuw.

If the outage occurred during an extract step, the previous bath will be repeated before the extract step begins.

2.1.8.



## Ontlaad de machine

**GEVAAR 3: Vastloop / Verstrik en Afbreek Gevaar**—Kontakt met te verwerken goederen kunnen de goederen om uw lichaam en ledematen draaien en u uiteen rijten / uitschakelen. De goederen zijn normaal gesproken afgeschermd door een gesloten trommel deur.

- Raak geen goederen aan die in de draaiende trommel liggen of die er gedeeltelijk uithangen

Als het wasprogramma gereed is of afgebroken wordt, dan wacht de trommel 25 seconden als de laatste stap een normale stap was. Als de laatste stap centrifugeren was, dan is de wachttijd 180 seconden. Probeer niet de deur te openen tijdens de wachttijd.

**Weergave of handeling**  
[Display or Action]

Ontgrendel de deur  
A.u.b. wachten

UNLOCKING THE DOOR  
PLEASE WAIT

Wacht op ontladen  
U

WAITING TO UNLOAD  
U



**Uitleg**

Display tijdens de laatste 15 seconden wachttijd of gedurende de gehele wachttijd als het programma handmatig was beëindigd.

Aan het eind van de wachttijd, klinkt het signaal.

Zet et signaal uit. De deur ontgrendelt, dan kunt u de machine ontladen.

**Explanation**

display during the last 15 seconds of coast, or during the entire coast time if the formula was manually terminated.

At the end of the coast time, the operator alarm sounds.

Silences the operator alarm. The door unlocks so you can unload the machine.

## Unload the Machine

**DANGER 3: Entangle and Sever Hazards**—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember you. The goods are normally isolated by the locked cylinder door.

- Do not touch goods inside or hanging partially outside the turning cylinder.

When the formula ends or is terminated, the cylinder coasts for 25 seconds if the last step was a bath step. If the last step was an extract, the coast time may be as much as 180 seconds. Do not attempt to open the door early.

## Hoofdstuk 3

# Herstellen fouten

## Chapter 3

# Correcting Errors

BICJHT04 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: DUT01 Applic: CJV CJH CJF CJX

### 3.1. **Foutmelding gedurende normaal bedrijf**

Als een foutmelding verschijnt in het onderste deel van het display wanneer de machine draait, de tijd in de bovenste displayregel wordt gestopt. Wanneer de fout is hersteld, start de timer weer. Om de meeste fouten te herstellen moet de machine uitgeschakeld worden. Beëindig het programma niet nadat de fout is opgelost. Zie ook het referentie instructieboek voor meer informatie.

### **Error Messages During Normal Operation**

If an error message appears on the bottom line of the display while the machine is running, the timer shown on the top line will stop counting. When the error is corrected, the timer resumes counting down. To troubleshoot most errors, suspend the formula in progress and turn power off. Do not terminate the formula if it is to be resumed after the error is corrected. See the reference manual for more information.

### Hoofdstuk 3. Herstellen fouten

#### Weergave of handeling [Display or Action]

Niveaus nog gemaakt

LEVELS STILL MADE

Te lang water  
vultijd

TOO LONG TO FILL

Te lang water  
vultijd

TOO LONG TO STEAM

Te lange cooldown  
tijd

TOO LONG TO COOL

#### Uitleg

De microprocessor krijgt nog informatie dat het waterniveau nog gemaakt is voordat de machine wil gaan centrifugeren, of net voor het vullen in een programmastap. Deze foutmelding reset zichzelf als het niveau laag is.

De tijd van het vullen overschrijdt de 10 minuten. Test de waterventielen, filters in de toevoerleiding en de waterdruk. De machine blijft vullen tot het niveau bereikt is. Als het niveau bereikt is reset de melding zich vanzelf.

**Alleen de modellen E-P Plus.**De ingestelde maximumtijd voor het opstomen naar de gewenste temperatuur is overschreden. Controleer de stoomklep, zeef, hoofdstoomkop en -druk, enzovoort. Het stomen gaat door totdat de temperatuur wordt bereikt. De foutconditie wordt dan automatisch opgeheven en normaal bedrijf wordt hervat.

**Alleen de modellen E-P Plus.**De ingestelde maximumtijd voor het afkoelen tot de gewenste temperatuur is overschreden. Controleer de koelklep en zeef (indien aanwezig), koudwaterdruk en de stand van de vernierklep op de koelinlaat. Het koelen wordt voortgezet totdat de gewenste temperatuur wordt bereikt. De foutconditie wordt dan automatisch opgeheven.

#### Explanation

The microprocessor is still receiving information that a level is made just before or during an extract step, or immediately before the fill for a bath step. This error is self-clearing when level is lost.

Time to fill to level exceeded 10 minutes. Check the water valves, strainers, supply lines, and water pressure. The machine will continue to fill until level is reached, at which time the error will automatically clear and normal operation will resume.

**E-P Plus models only.**The configured maximum time to steam up to the desired temperature has been exceeded. Check the steam valve, strainer, main steam header and pressure, etc. Steaming will continue until temperature is achieved, when the error will automatically clear and normal operation will resume.

**E-P Plus models only.**The configured maximum time to cool down to the desired temperature has been exceeded. Check the cooldown valve and strainer if equipped, cold water pressure, and position of vernier valve on cooldown inlet. Cooldown will continue until the desired temperature is achieved, when the error will automatically clear.

Weergave of handeling [Display or Action]	Uitleg	Explanation
<div data-bbox="279 306 630 432" style="border: 1px solid black; padding: 2px;">Tijd leeglopen machine duurt te lang</div> <div data-bbox="279 443 630 506" style="border: 1px solid black; padding: 2px;">TOO LONG TO DRAIN</div>	<p>De machine uitlaat functioneert niet juist. Het leeglopen duurt te lang. De foutmelding reset zichzelf als het niveau laag genoeg is.</p>	<p>The machine did not drain properly in the allotted drain time. This self-correcting error will clear when the water level in the basket is low enough to begin the next operation.</p>
<div data-bbox="279 548 630 642" style="border: 1px solid black; padding: 2px;">Check temperatuurvoeler</div> <div data-bbox="279 653 630 716" style="border: 1px solid black; padding: 2px;">CHECK PROBE</div>	<p><b>Alleen de modellen E-P Plus.</b> Deze foutmelding geeft aan dat de weerstand van de temperatuursonde zich buiten het gespecificeerde bereik bevindt. Test de sonde door de kabels van de sonde los te koppelen van het moederbord en de weerstand te meten met een nauwkeurige digitale weerstandsmeter. De weerstand tussen de twee kabels moet tussen 2 kΩ en 35 kΩ liggen. De weerstand tussen elk van de kabels en aarde moet oneindig zijn.</p>	<p><b>E-P Plus models only.</b> This error message indicates that the resistance of the temperature probe is outside the specified range. Test the probe by disconnecting the probe leads from the processor board and checking the resistance with an accurate digital ohmmeter. Resistance between the two leads must be between 2K and 35K Ohms. Resistance between each lead and ground must be infinite.</p>
<div data-bbox="279 1073 630 1136" style="border: 1px solid black; padding: 2px;">Externe fout</div> <div data-bbox="279 1146 630 1209" style="border: 1px solid black; padding: 2px;">EXTERNAL FAULT</div>	<p>Op de meeste machines betekent deze fout dat de geprogrammeerde zeepinjectie weigert. Meestal omdat de zeepdosering leeg is. Wanneer de installatie gevuld wordt, reset de melding zich vanzelf.</p> <p>Op 48040F4J/F7B modellen, deze storing geeft aan dat de lagerhuis luchtdruk te laag is. Deze luchtdruk beschermt het lagerhuis zodat er geen water in komt.</p>	<p>On most machines, this error indicates that the programmed chemical injection failed, usually because the chemical supply system is empty. When chemicals are added and can be injected, this error clears automatically, allowing operation to resume.</p> <p>On 48040F7J/F7B models, this error indicates that the bearing air pressure is below the minimum required to help protect the bearing from water contamination.</p>

### Hoofdstuk 3. Herstellen fouten

#### Weergave of handeling [Display or Action]

Rem druk fout
BRAKE PRESS. FAULT

#### Uitleg

Deze storing wordt gemeld bij machines met een cilinder rem. De storingsmelding geeft aan dat de rem niet vrij is. De reden is meestal dat de luchtdruk onvoldoende is. Test de luchtdruk.

#### Explanation

This error appears only on machine models equipped with a cylinder brake. The message indicates that the brake is engaged when it should be disengaged. This is usually because the machine is not receiving sufficient air pressure to open the normally-closed brake. Check the plant compressed air supply.

THREE WIRE DISABLED
THREE WIRE DISABLED

Het drie-aderige relais, gedeactiveerd. Dit relais verzorgt de voeding van de besturingsschakeling voor de machine. Na activering door het tijdelijk indrukken van de *Start* knop (1) blijft het relais geactiveerd door de eigen normaal-open contacten, inclusief motoroverbelasting, deurvergrendelingen, enzovoort. Mocht een van deze contacten zelfs maar tijdelijk worden geopend, dan stopt de machine en verschijnt dit scherm. Deze fout kan alleen worden opgeheven door te drukken op de *Start* knop (1), en alleen als de foutconditie dan is opgeheven.

The three-wire relay de-energized. This relay provides control circuit power to the machine. Once energized by momentarily depressing the *Start* button (1), it is held energized by its own normally open contacts, along with motor overloads, door interlocks, etc. Should any of these contacts open even momentarily, the machine stops and this display appears. This error can only be cleared by depressing the *Start* button (1), and only then if the error has been cleared.

Frequentieregelaar fout
INVERTER FAULT

Deze storingsmelding wordt gemeld als de microprocessor geen ingangsignaal ontvangt van de frequentieregelaar binnen 14 seconden na start van het wasprogramma. Na 14 seconden zonder ingangsignaal van de frequentieregelaar het programma stopt, de trommel staat stil en de uitlaat gaat open. Reset met de *Volgende* toets (2).

This error message appears if the microprocessor does not receive an input from the inverter within 14 seconds of the beginning of the formula. After 14 seconds without an inverter input, the timer stops, the basket is stationary, and the drain valve opens. To recover, press the *Next* key (2).



**Weergave of handeling**  
[Display or Action]

Machine in onbalans.  
Bezig met herstel  
cyclus.

VIBRATION SW TRIPPED  
RECOVERY SEQUENCE

**Uitleg**

Wanneer de onbalans schakelaar sluit, stopt het programma na 45-85 seconden (120 seconden op 42032F7J modellen), de trommel keert op wassnelheid als de trommel vult met water. Wanneer laag niveau is bereikt, de trommel keert om voor een extra minuut op wassnelheid, dan accelereert de machine naar centrifugesnelheid.

**Explanation**

When the vibration switch closes, the timer stops. After 45 to 85 seconds (120 seconds on 42032F7J models), the basket reverses at wash speed as the cylinder fills with water. When low level is achieved, the cylinder reverses for one additional minute at wash speed, then accelerates to extract speed.

— Einde BICJHT04 —

— End of BICJHT04 —

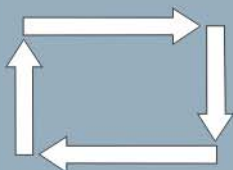


**Section**

**6**

**Polski**





Published Manual Number: MQCJVO01PL

- Specified Date: 20090831
- As-of Date: 20090831
- Access Date: 20100607
- Depth: Detail
- Custom: n/a
- Applicability: CJV CJH CJF CJX
- Language Code: POL01, Purpose: publication, Format: 2colA

## Instrukcja Użytkownika [Operator Guide]—

# Washer-extractor Models with E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Controls [Washer-extractor Models with E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Controls]

**OSTRZEŻENIE:** Informacje zawarte w niniejszej instrukcji zostały przekazane przez Pellerin Milnor Corporation **tylko w wersji angielskiej**. Firma Milnor podjęła wszelkie środki, aby uzyskać tłumaczenie najwyższej jakości, jednakże nie składa ona żadnych oświadczeń, obietnic ani gwarancji dotyczących dokładności, kompletności czy rzetelności informacji zawartych w instrukcji sporządzonej w wersji językowej innej niż angielska.

Firma Milnor nie podjęła prób sprawdzenia informacji zawartych w wersji językowej innej niż angielska, gdyż tłumaczenie zostało w całości wykonane przez stronę trzecią. Dlatego też firma Milnor nie odpowiada za błędy związane z treścią lub formą niniejszej instrukcji i zrzeka się odpowiedzialności za konsekwencje wynikające z korzystania z instrukcji w wersji językowej innej niż angielska.

**W żadnym wypadku firma Milnor ani jej przedstawiciele czy też pracownicy nie ponoszą odpowiedzialności za jakiegokolwiek bezpośrednie, pośrednie, uboczne, lub wtórne straty, albo szkody moralne, wynikające z błędów lub pominięć w tłumaczeniu, bądź też będące następstwem stosowania lub niemożności zastosowania niniejszej instrukcji sporządzonej w wersji językowej innej niż angielska, lub polegania na niej.**

Zapoznaj się z Instrukcją Bezpieczeństwa

**Stosowane Milnor® produkty wg modelu: [Applicable Milnor® products by model number:]**

30015T5X	30015V7J	30022H8J	30022T5X	30022V6J	30022VRJ	30022X8J
36021V5J	36021V7J	36026V5J	36026V7J	36026X8J	42026V6J	42026X7J
42030V6J	42032X7J	48040F7B	48040F7J	MWR12J5	MWR12X5	MWR16J5
MWR16X5	MWR18J4	MWR18J6	MWR18X4			

# Spis Treści [English table of contents follows]

## Rozdziały

## Rysunki, Tablice i dodatki

### Rozdział 1. Opis elementów sterujących

- 1.1. Elementy sterowania w modelach E-P Plus® i E-P Express®** Rysunek 1: Typowy panel sterowania  
(Dokument BICJHF01)

### Rozdział 2. Normalna eksploatacja

**2.1. Normalna eksploatacja maszyny** (Dokument BICJVO03)

- 2.1.1. Ważne informacje na temat bezpieczeństwa
- 2.1.2. Sprawdzenie ustawienia przełączników
- 2.1.3. Ładowanie maszyny
- 2.1.4. Wybieranie i uruchamianie formuły
- 2.1.5. Działanie monitora
- 2.1.6. Przerwanie wykonywania formuły
- 2.1.7. Restart po przerwie w zasilaniu
- 2.1.8. Rozładowanie maszyny

Suplement 1: Opóźnienie włączenia zasilania ze względów bezpieczeństwa

### Rozdział 3. Korygowanie błędów

- 3.1. Komunikaty o błędach w trakcie normalnej eksploatacji**  
(Dokument BICJHT04)

# Table of Contents

Sections	Figures, Tables, and Supplements
<b>Chapter 1. Description of Controls</b>	
<b>1.1. Operator Controls on E-P Plus® and E-P Express® Models</b> (Document BICJHF01)	Figure 1: Typical Control Panel
<b>Chapter 2. Normal Operation</b>	
<b>2.1. Normal Machine Operation</b> (Document BICJVO03)	
2.1.1. Start Here for Safety	
2.1.2. Check Switch Settings	Supplement 1: The Power-up Safety Delay
2.1.3. Load the Machine	
2.1.4. Select and Start a Formula	
2.1.5. Monitor Operation	
2.1.6. How to Terminate a Running Formula	
2.1.7. How to Restart after Losing Power	
2.1.8. Unload the Machine	
<b>Chapter 3. Correcting Errors</b>	
<b>3.1. Error Messages During Normal Operation</b> (Document BICJHT04)	



# Rozdział 1

## Opis elementów sterujących

# Chapter 1

## Description of Controls

BICJHF01 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: POL01 Applic: CJV CJH CJF CJX

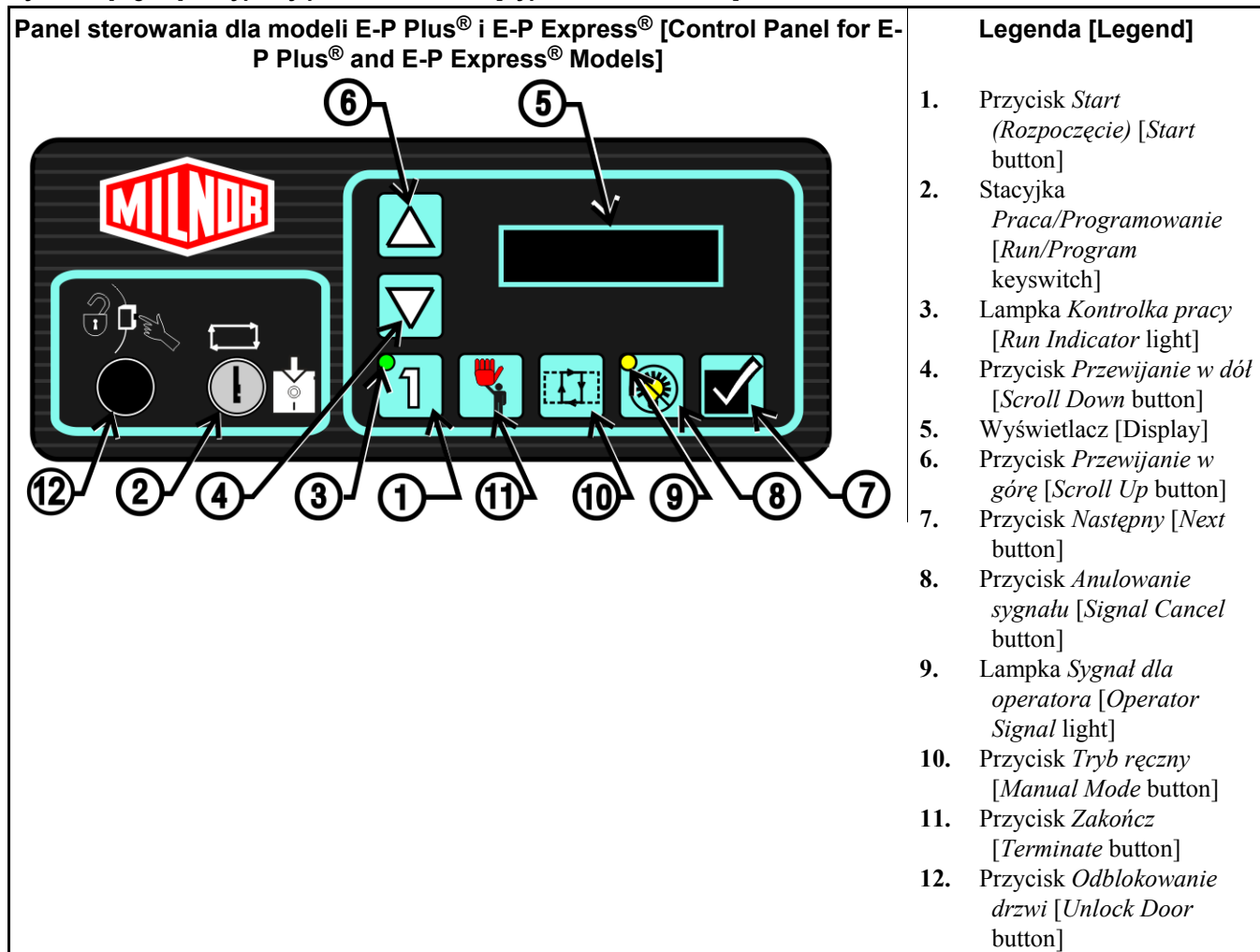
### 1.1. Elementy sterowania w modelach E-P Plus<sup>®</sup> i E-P Express<sup>®</sup>

W niniejszym dokumencie opisano elementy sterowania przeznaczone dla użytkownika i stosowane podczas normalnej eksploatacji maszyny. Dodatkowe informacje na temat innych elementów sterujących, które przedstawia [Rysunek 1](#), można znaleźć w podręczniku referencyjnym.

### Operator Controls on E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Models

This document describes the user controls during normal machine operation. For additional information on other controls shown in [Figure 1](#), see the reference manual.

Rysunek [Figure] 1: Typowy panel sterowania [Typical Control Panel]



**Display or Action**  
[Display or Action]

**Wyjaśnienie**

**Explanation**

1

Gdy na wyświetlaczu pojawi się napis *Uruchom formułę*, należy nacisnąć ten przycisk, aby uruchomić formułę.

When the display says *Run Formula*, press this button to start the formula.

☐ / ☒

W trakcie normalnej pracy stacyjka *Praca/Programowanie* musi być ustawiona w położeniu ☐. Jest to położenie pracy automatycznej.

During normal operation, the *Run/Program* keyswitch must be set to ☐. This is the automatic position.

▲ / ▼

Przyciski *Przewijanie w górę* i *Przewijanie w dół* służą do wybierania żądanej formuły.





Use the *Scroll Up* and *Scroll Down* buttons to select the desired formula.

☑

Przycisk *Następny* nie jest używany przy normalnej eksploatacji.

The *Next* button is not used during normal operation.

**Display or Action**  
[Display or Action]

Wyjaśnienie	Explanation
 Przycisk <i>Anulowanie sygnału</i> ucisza sygnał dla operatora, który rozlega się po prawidłowym zakończeniu formuły. Ponadto, jeśli zaprogramowane jest generowanie sygnału dla operatora przy konieczności wstrzyknięcia środka chemicznego, należy wstrzyknąć środek chemiczny i nacisnąć ten przycisk, aby wznowić działanie.	The <i>Signal Cancel</i> button silences the operator signal that sounds when a formula completes normally. Also, if an operator signal is programmed with a chemical injection, add the chemical and press this button to resume operation.
 Przycisk <i>Tryb ręczny</i> nie jest używany przy normalnej eksploatacji.	The <i>Manual</i> button is not used during normal operation.
 Przycisk <i>Zakończ</i> anuluje wszystkie pozostałe kroki bieżącej formuły i rozpoczyna procedurę wyłączania maszyny. Formuły nie można wznowić.	The <i>Terminate</i> button cancels all remaining steps in the current formula and starts the shutdown procedure for the machine. The formula can not be resumed.
 Przycisk <i>Odblokowanie drzwi</i> umożliwia otwarcie drzwi, jeśli spełnione są wszystkie warunki bezpieczeństwa.	The <i>Unlock Door</i> button allows you to open the door if all other safety conditions are met.

— Koniec BICJHF01 —

— End of BICJHF01 —

## Rozdział 2

# Normalna eksploatacja

## Chapter 2

# Normal Operation

BICJVO03 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: POL01 Applic: CJV CJH CJF CJX

### 2.1. Normalna eksploatacja maszyny

### Normal Machine Operation

#### 2.1.1. Ważne informacje na temat bezpieczeństwa

#### Start Here for Safety

Ten dokument został opracowany, aby dostarczyć operatorom pralki-wirówki informacji niezbędnych do obsługi maszyny. Nie należy podejmować prób obsługi maszyny przed uzyskaniem szczegółowych instrukcji od przeszkolonego operatora.

This document is designed to remind the person operating this washer-extractor what is required to operate this machine. Do not attempt to operate this machine before a trained operator has explained the details to you.



**Niebezpieczeństwo 1:** Inne zagrożenia—Nieostrożne działanie użytkownika może doprowadzić do śmierci lub kalectwa personelu, uszkodzenia urządzenia i innego sprzętu w pralni i/lub utratę gwarancji.

**DANGER 1: Multiple Hazards**—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.



**OSTRZEŻENIE 2:** Porażenie prądem i ryzyko poparzeń wywołanych prądem—Kontakt z wysokim napięciem grozi śmiercią lub poważnymi obrażeniami. Elementy wewnątrz obudowy urządzenia pozostają pod napięciem do momentu wyłączenia zasilania odłącznikiem głównym.

**CAUTION 2: Electrocutation and Electrical Burn Hazards**—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.








- Nie należy odblokowywać ani otwierać drzwi skrzynki elektrycznej.
- Znaleźć miejsce podłączenia głównej linii zasilania elektrycznego i skorzystać z niego w sytuacji zagrożenia, odłączając całe zasilanie od urządzenia.
- Serwisowania urządzenia nie powinny podejmować się osoby niewykwalifikowane i nieuprawnione.

- Do not unlock or open electric box doors.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.

Należy zapoznać się z zagrożeniami oraz sposobami ich unikania.

### 2.1.2. Sprawdzenie ustawienia przełączników

### Check Switch Settings

Display or Action [Display or Action]	Wyjaśnienie	Explanation
	Sprawdzić, czy stacyjka <i>praca/programowanie</i> jest ustawiona w położeniu  .	Check that the <i>run/program</i> keyswitch is at  .
	Sprawdzić, czy którekolwiek przełączniki <i>zatrzymania awaryjnego</i> nie znajdują się w położeniu <i>zewnętrznym</i> .	Check that any <i>emergency stop</i> switches are in the <i>out</i> position.
	Sprawdzić, czy wyłącznik główny (jeśli jest na wyposażeniu) znajduje się w położeniu  .	Check that the master switch, if provided, is at  .

#### Suplement 1

#### Opóźnienie włączenia zasilania ze względów bezpieczeństwa

Niektóre pralki-wirówki Milnor® ze sterownikiem nie wykorzystują czujnika prędkości do sprawdzenia, czy kosz przestał się obracać. Dlatego po włączeniu zasilania maszyny musi upłynąć co najmniej 80 sekund zanim będzie można podjąć jakiegokolwiek działania. Ten czas wystarczy do całkowitego samoistnego zatrzymania kosza w wypadku, gdy zasilanie zostało odłączone w trakcie wirowania z dużą prędkością i przywrócone zanim kosz się zatrzymał.

#### Suplement 1

#### The Power-up Safety Delay

Some Milnor® washer extractors do not use a speed sensing device to verify that the basket has stopped rotating. Therefore, when power is first applied to the machine, at least 80 seconds must elapse before any further operations can be attempted. This provides sufficient time for the basket to coast to a complete stop if power was lost while the machine was in a high speed extract and restored before the basket stopped.

### 2.1.3. Ładowanie maszyny

Należy załadować maszynę zgodnie ze znamionową pojemnością i prawidłowo zamknąć drzwi ładunkowe.

### Load the Machine

Load the machine to the rated capacity and securely close the loading door.

## 2.1.4. Wybieranie i uruchamianie formuły

## Select and Start a Formula

### Display or Action

[Display or Action]

```
RUN FORMULA
00 OK TO POWER OFF
```

```
RUN FORMULA
00 OK TO POWER OFF
```



```
RUN FORMULA
07 FORMULA NUMBER 07
```

```
RUN FORMULA
07 FORMULA NUMBER 07
```



```
RUN FORMULA
DOES NOT EXIST
```

```
RUN FORMULA
DOES NOT EXIST
```

### Wyjaśnienie

To jest ekran *Formuła uruchomienia*. Pozwala on na odłączenie zasilania od maszyny bez narażania elementów elektronicznych na uszkodzenie. Umożliwia również wybranie formuły do uruchomienia.

przechodzą kolejno naprzód/wstecz przez 30 formuł.

Przykładowy stan wyświetlacza: *Formuła 07* wybrana do uruchomienia

uruchamia maszynę z wybraną formułą.

oznacza, że formuła wybrana do uruchomienia nie została zaprogramowana. Ten komunikat jest widoczny przez trzy sekundy.

### Explanation

This is the *Run Formula* display. From this display, you can disconnect power from the machine without risking damage to electronic parts, or you can select a formula to run.

indexes forward/backward through the 30 formulas.

Example display: *Formula 07* selected for running

starts the machine with the selected formula.

indicates that the formula selected for running has not been programmed. This display appears for three seconds.

## 2.1.5. Działanie monitora

## Monitor Operation

### Display or Action

[Display or Action]

```
23:04 F02S01 02:37
TEMP A168/D170 LEV 1
```

```
23:04 F02S01 02:37
TEMP A168/D170 LEV 1
```

```
23:04 STEP 01 02:37
TEMP A168/D170 SPD 0
```

```
23:04 STEP 01 02:37
TEMP A168/D170 SPD 0
```

```
23:04 F02S01 02:37
```

```
23:04 F02S01 02:37
```

```
TEMP A168/D170 LEV 1
```

```
TEMP A168/D170 LEV 1
```

### Wyjaśnienie

Te dwa ekrany są wyświetlane na przemian podczas normalnej pracy w niektórych modelach E-P Plus<sup>®</sup>. Modele E-P Express<sup>®</sup> wyświetlają inne dane na temat etapu, ale nie wyświetlają danych o temperaturze w zbiorniku.

STEP01 to bieżący krok.

EXTRACT oznacza, że maszyna wykonuje wirowanie.

TIMEHALT oznacza, że licznik czasu został zatrzymany na czas wstrzykiwania środka chemicznego. Aby ta funkcja działała, musi być prawidłowo zainstalowany układ dostarczania środka chemicznego.

Temperatura w modelu E-P Plus<sup>®</sup> jest mierzona w stopniach Fahrenheita lub Celsjusza, zgodnie z konfiguracją maszyny.

A168 oznacza, że aktualnie osiągnięta temperatura wynosi 168 stopni. Temperatura jest wyświetlana tylko wtedy, gdy maszyna jest wyposażona w odpowiednio skonfigurowany sterownik temperatury.

### Explanation

These two displays alternate during normal operation on some E-P Plus<sup>®</sup> models. E-P Express<sup>®</sup> models display other data about the step, but not bath temperature data.

STEP01 is the current step.

EXTRACT indicates that the machine is extracting the goods.

TIMEHALT indicates that the timer is stopped for a chemical injection. The chemical supply equipment must be properly installed for this feature to work.

Temperature in this E-P Plus<sup>®</sup> machine is measured in degrees Fahrenheit or Celsius, according to machine configuration.

A168 indicates that the current achieved temperature is 168 degrees. Temperature is displayed only if machine is equipped with and configured for temperature control.

**Display or Action**  
[Display or Action]

**Wyjaśnienie**

**Explanation**

SPD 0	LEV 2
-------	-------

SPD 0	LEV 2
-------	-------

D170 oznacza, że pożądana temperatura dla tego kroku wynosi 170 stopni. Temperatura jest wyświetlana tylko wtedy, gdy maszyna jest wyposażona w odpowiednio skonfigurowany sterownik temperatury.

LEV 2 oznacza, że osiągnięto 2. poziom kąpieli.

SPD 0 oznacza szybkość kąpieli dla tego kroku.

WAIT FOR LEVEL 2 H oznacza, że dla tego kroku zaprogramowano poziom 2., ale jeszcze nie został on osiągnięty. H oznacza, że otwarty jest zawór gorącej wody; C oznacza zimną wodę, a 3 oznacza dodatkową wodę.

Symbol CHEM 03 jest wyświetlany w trakcie wstrzykiwania środka chemicznego nr 03. W trakcie wstrzykiwania wyświetlany jest numer środka chemicznego (można podłączyć maksymalnie pięć).

FINAL EXTRACT oznacza, że trwa ostatni krok formuły prania.

D170 indicates that the desired temperature for this step is 170 degrees. Temperature is displayed only if the machine is equipped with and configured for temperature control.

LEV 2 indicates that the bath level achieved is Level 2.

SPD 0 indicates the bath speed for this step.

WAIT FOR LEVEL 2 H indicates that Level 2 is programmed for this step, but is not yet achieved. The H indicates that the hot water valve is open; C indicates cold water, and 3 indicates extra water.

CHEM 03 is displayed when Chemical 03 is being injected. The number for each chemical (up to five may be connected) is displayed as the chemical is injected.

FINAL EXTRACT indicates that the step in progress is the final step of the wash formula.

### 2.1.6. Przerwanie wykonywania formuły

### How to Terminate a Running Formula

**Display or Action**  
[Display or Action]

**Wyjaśnienie**

**Explanation**



Anuluje bieżącą formułę i powoduje powrót do ekranu *Formuła uruchomienia* (patrz Rozdział 2.1.4 “Wybieranie i uruchamianie formuły”).

Cancels the current formula and returns the machine to the *Run Formula* display (see Section 2.1.4 “Select and Start a Formula”).



### 2.1.7. Restart po przerwie w zasilaniu

Sterownik pamięta formułę i krok wykonywany w momencie odłączenia lub awarii zasilania, gdy maszyna pracowała w trybie automatycznym.

**Display or Action**  
[Display or Action]

```
PRESS START TO RUN
STEP xx - FORMULA yy
```

```
PRESS START TO RUN
STEP xx - FORMULA yy
```

**Wyjaśnienie**

W większości modeli maszyn po przywróceniu zasilania pojawi się ten ekran. Wyświetlany jest numer formuły i kroku wykonywanych w momencie odcięcia zasilania.

1

Wznawia formułę od wyświetlanego kroku. Jeśli odcięcie zasilania nastąpiło w kroku kąpieli, konieczne jest odtworzenie poziomu i temperatury (jeśli są zadane), nawet jeśli osiągnięto je już przed odcięciem zasilania. Wszelkie zadane środki chemiczne zostaną ponownie wstrzyknięte.

Jeśli odcięcie zasilania nastąpiło w trakcie spuszczenia wody z kąpieli, krok kąpieli zostanie powtórzony, po czym zostanie wykonany następny zadany krok.

Jeśli odcięcie zasilania wystąpiło w kroku wirowania, poprzednia kąpiel zostanie powtórzona przed rozpoczęciem wirowania.

**Explanation**

On most machine models, this display appears when power is restored. The formula and step which were in progress when power was interrupted are shown.

Resumes the formula at the displayed formula and step. If the outage occurred in a bath step, level and temperature (if commanded) must again be satisfied, even if these were already satisfied before power was lost. Any commanded chemicals will be injected again.

If the outage occurred during the drain part of a bath step, the bath step will be repeated, then followed by the next commanded step.

If the outage occurred during an extract step, the previous bath will be repeated before the extract step begins.

### How to Restart after Losing Power

The control remembers the formula and step it was executing if power fails or if the wall disconnect is turned off while the machine is operating in automatic mode.

### 2.1.8. Rozładowanie maszyny



**Niebezpieczeństwo 3: Zagrożenie Przycięcia i Zaplątania**—Dotykając rzeczy, które się poruszają może spowodować zaplątanie się ich wokół Twojego ciała lub kończyn i wyrwanie jakiejś części ciała. Dostęp do rzeczy ograniczony jest zamkniętymi drzwiami bębna.

- Gdy bęben się obraca nie dotykaj rzeczy znajdujących się wewnątrz lub tylko częściowo zwisających na zewnątrz.

Gdy formuła zakończy się lub zostanie

### Unload the Machine

**DANGER 3: Entangle and Sever Hazards**—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember you. The goods are normally isolated by the locked cylinder door.

- Do not touch goods inside or hanging partially outside the turning cylinder.

When the formula ends or is terminated, the


przerwana, a ostatnim krokiem była kąpiel, bęben obraca się swobodnie przez 25 sekund. Jeśli ostatnim krokiem było wirowanie, swobodne obracanie może trwać nawet 180 sekund. Nie należy otwierać drzwi zbyt wcześnie.

cylinder coasts for 25 seconds if the last step was a bath step. If the last step was an extract, the coast time may be as much as 180 seconds. Do not attempt to open the door early.

**Display or Action**  
[Display or Action]

UNLOCKING THE DOOR  
PLEASE WAIT

UNLOCKING THE DOOR  
PLEASE WAIT

WAITING TO UNLOAD  


WAITING TO UNLOAD  




**Wyjaśnienie**

komunikat widoczny przez ostatnie 15 sekund swobodnego obracania bębna lub przez cały czas obracania, jeśli formuła została przerwana ręcznie.

Gdy bęben przestanie się swobodnie obracać, rozlega się alarm dla operatora.

Ucisza alarm dla operatora. Drzwi zostają odblokowane i można rozładować maszynę.

**Explanation**

display during the last 15 seconds of coast, or during the entire coast time if the formula was manually terminated.

At the end of the coast time, the operator alarm sounds.

Silences the operator alarm. The door unlocks so you can unload the machine.

## Rozdział 3

# Korygowanie błędów

## Chapter 3

# Correcting Errors

BICJHT04 (Published) Book specs- Dates: 20090831 / 20090831 / 20100607 Lang: POL01 Applic: CJV CJH CJF CJX

### 3.1. **Komunikaty o błędach w trakcie normalnej eksploatacji**

Jeśli podczas pracy maszyny w dolnym wierszu wyświetlacza pojawi się komunikat o błędzie, licznik czasu w górnym wierszu przerwie odliczanie. Odliczanie zostanie wznowione po wyeliminowaniu błędu. Rozwiązanie większości błędów wymaga zawieszenia realizowanej obecnie formuły i wyłączenia zasilania. Nie należy kończyć formuły, jeśli ma ona być wznowiona po wyeliminowaniu błędu. Więcej informacji zawiera podręcznik referencyjny.

### **Error Messages During Normal Operation**

If an error message appears on the bottom line of the display while the machine is running, the timer shown on the top line will stop counting. When the error is corrected, the timer resumes counting down. To troubleshoot most errors, suspend the formula in progress and turn power off. Do not terminate the formula if it is to be resumed after the error is corrected. See the reference manual for more information.

**Display or Action**  
[Display or Action]

NAPEŁNIANIE DO  
POZIOMÓW

LEVELS STILL MADE

**Wyjaśnienie**

Mikroprocesor otrzymuje informacje, że wciąż trwa uzyskiwanie wymaganego poziomu, a zaraz ma rozpocząć się lub już trwa krok wirowania lub zaraz ma rozpocząć się krok napełniania do kąpieli. Ten błąd jest anulowany samoczynnie po utracie poziomu.

**Explanation**

The microprocessor is still receiving information that a level is made just before or during an extract step, or immediately before the fill for a bath step. This error is self-clearing when level is lost.

ZA DŁUGIE  
NAPEŁNIANIE

TOO LONG TO FILL

Czas napełniania do wymaganego poziomu przekroczył 10 minut. Należy sprawdzić zawory wodne, filtry siatkowe, linie zasilające i ciśnienie wody. Maszyna będzie kontynuowała napełnianie aż do osiągnięcia poziomu i wówczas błąd zostanie automatycznie skasowany i wznowione zostanie normalne działanie.

Time to fill to level exceeded 10 minutes. Check the water valves, strainers, supply lines, and water pressure. The machine will continue to fill until level is reached, at which time the error will automatically clear and normal operation will resume.

ZA DŁUGIE OGRZ.  
PAROWE

TOO LONG TO STEAM

**Tylko modele E-P Plus.**Przekroczone skonfigurowany maksymalny czas podgrzewania parowego do określonej temperatury. Należy sprawdzić zawór pary, filtr siatkowy, główny rozgałęźnik i ciśnienie pary itd. Podgrzewanie będzie kontynuowane do osiągnięcia właściwej temperatury. Wówczas błąd zostanie automatycznie skasowany i wznowione zostanie normalne działanie.

**E-P Plus models only.**The configured maximum time to steam up to the desired temperature has been exceeded. Check the steam valve, strainer, main steam header and pressure, etc. Steaming will continue until temperature is achieved, when the error will automatically clear and normal operation will resume.

ZA DŁUGIE CHŁODZENIE

TOO LONG TO COOL

**Tylko modele E-P Plus.**Przekroczone skonfigurowany maksymalny czas chłodzenia do określonej temperatury. Należy sprawdzić zawór schładzania i filtr siatkowy (jeśli są na wyposażeniu), ciśnienie zimnej wody i położenie zaworu regulacyjnego na wlocie wody chłodzącej. Schładzanie będzie kontynuowane do osiągnięcia właściwej temperatury. Wówczas błąd zostanie automatycznie skasowany.

**E-P Plus models only.**The configured maximum time to cool down to the desired temperature has been exceeded. Check the cooldown valve and strainer if equipped, cold water pressure, and position of vernier valve on cooldown inlet. Cooldown will continue until the desired temperature is achieved, when the error will automatically clear.

Display or Action [Display or Action]	Wyjaśnienie	Explanation
TOO LONG TO DRAIN	Spuszczanie wody z maszyny nie zakończyło się w przeznaczonym na to czasie. Ten błąd zostanie skasowany automatycznie, gdy poziom wody w koszu będzie na tyle niski, że możliwe będzie rozpoczęcie następnej operacji.	The machine did not drain properly in the allotted drain time. This self-correcting error will clear when the water level in the basket is low enough to begin the next operation.
TOO LONG TO DRAIN		
CHECK PROBE	<b>Tylko modele E-P Plus.</b> Ten komunikat o błędzie informuje, że rezystancja sondy temperatury nie mieści się w określonym przedziale. Należy przetestować sondę, odłączając jej przewody od płyty procesora i sprawdzając rezystancję za pomocą dokładnego omomierza cyfrowego. Rezystancja między przewodami musi mieścić się w przedziale od 2 kiloomów do 35 kiloomów. Rezystancja między każdym z przewodów a masą musi być nieskończona.	<b>E-P Plus models only.</b> This error message indicates that the resistance of the temperature probe is outside the specified range. Test the probe by disconnecting the probe leads from the processor board and checking the resistance with an accurate digital ohmmeter. Resistance between the two leads must be between 2K and 35K Ohms. Resistance between each lead and ground must be infinite.
CHECK PROBE		
EXTERNAL FAULT	W większości maszyn ten błąd oznacza, że nie powiodło się zaprogramowanie wstrzykiwanie środka chemicznego, zwykle z powodu braku środka w systemie. Po uzupełnieniu środka chemicznego, gdy będzie możliwe wstrzyknięcie, ten błąd zostaje skasowany automatycznie i możliwe jest wznowienie działania.	On most machines, this error indicates that the programmed chemical injection failed, usually because the chemical supply system is empty. When chemicals are added and can be injected, this error clears automatically, allowing operation to resume.
EXTERNAL FAULT	W modelach 48040F7J/F7B ten błąd wskazuje, że ciśnienie powietrza w łożysku jest niższe od minimalnego wymaganego do zabezpieczenia łożyska przed zanieczyszczeniem wodą.	On 48040F7J/F7B models, this error indicates that the bearing air pressure is below the minimum required to help protect the bearing from water contamination.

Display or Action [Display or Action]	Wyjaśnienie	Explanation
<div style="border: 1px solid black; padding: 2px; text-align: center;">BRAKE PRESS. FAULT</div> <div style="border: 1px solid black; padding: 2px; text-align: center;">BRAKE PRESS. FAULT</div>	<p>Ten błąd pojawia się tylko w modelach maszyn wyposażonych w hamulec bębna. Komunikat oznacza, że hamulec jest załączony w sytuacji, gdy powinien być wyłączony. Zwykle powodem jest zbyt niskie ciśnienie powietrza, które nie wystarcza do otwarcia hamulca (normalnie zamkniętego). Należy sprawdzić zakładową instalację sprężonego powietrza.</p>	<p>This error appears only on machine models equipped with a cylinder brake. The message indicates that the brake is engaged when it should be disengaged. This is usually because the machine is not receiving sufficient air pressure to open the normally-closed brake. Check the plant compressed air supply.</p>
<div style="border: 1px solid black; padding: 2px; text-align: center;">THREE WIRE DISABLED</div> <div style="border: 1px solid black; padding: 2px; text-align: center;">THREE WIRE DISABLED</div>	<p>Przełącznik odłączania zasilania. Ten przełącznik umożliwia kontrolę zasilania obwodu urządzenia. Po włączeniu obwodu przez naciśnięcie przycisku <i>Start (Rozpoczęcie)</i> (T) doprowadza on zasilanie przez otwarte styki, z przeciążeniem silnika, blokadami drzwi itd. Jeśli nastąpi przerwanie kontaktu na stykach (nawet chwilowe), maszyna zatrzymuje pracę i wyświetla się ten komunikat. Komunikat o błędzie można usunąć przez naciśnięcie przycisku <i>Start (Rozpoczęcie)</i> (T), ale jedynie po usunięciu usterki.</p>	<p>The three-wire relay de-energized. This relay provides control circuit power to the machine. Once energized by momentarily depressing the <i>Start</i> button (T), it is held energized by its own normally open contacts, along with motor overloads, door interlocks, etc. Should any of these contacts open even momentarily, the machine stops and this display appears. This error can only be cleared by depressing the <i>Start</i> button (T), and only then if the error has been cleared.</p>
<div style="border: 1px solid black; padding: 2px; text-align: center;">INVERTER FAULT</div> <div style="border: 1px solid black; padding: 2px; text-align: center;">INVERTER FAULT</div>	<p>Ten komunikat o błędzie pojawia się, jeśli mikroprocesor nie otrzyma sygnału wejściowego z inwertera w ciągu 14 sekund od rozpoczęcia formuły. Po 14 sekundach bez sygnału z inwertera licznik czasu zatrzymuje się, kosz jest zatrzymywany, a zawór spustowy otwiera się. Aby wznowić działanie, należy nacisnąć przycisk <i>Następny</i> (N).</p>	<p>This error message appears if the microprocessor does not receive an input from the inverter within 14 seconds of the beginning of the formula. After 14 seconds without an inverter input, the timer stops, the basket is stationary, and the drain valve opens. To recover, press the <i>Next</i> key (N).</p>

Display or Action [Display or Action]	Wyjaśnienie	Explanation
<div style="border: 1px solid black; padding: 2px; text-align: center;">           VIBRATION SW TRIPPED RECOVERY SEQUENCE         </div>	<p>Po zwarceniu styku czujnika wibracji licznik czasu jest zatrzymywany. Po 45 do 85 sekundach (120 sekund w modelach 42032F7J) odwracany jest kierunek kosza przy prędkości prania, a bęben napęlnia się wodą. Po osiągnięciu niskiego poziomu bęben porusza się w odwrotnym kierunku z prędkością prania jeszcze przez minutę, a potem przyspiesza do prędkości wirowania.</p>	<p>When the vibration switch closes, the timer stops. After 45 to 85 seconds (120 seconds on 42032F7J models), the basket reverses at wash speed as the cylinder fills with water. When low level is achieved, the cylinder reverses for one additional minute at wash speed, then accelerates to extract speed.</p>

— Koniec BICJHT04 —

— End of BICJHT04 —

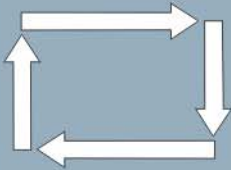




**Section**  
**português**

**7**





**Published Manual Number: MQCJVO01PT**

- Specified Date: 20090831
- As-of Date: 20090831
- Access Date: 20110207
- Depth: Detail
- Custom: n/a
- Applicability: CJV CJH CJF CJX
- Language Code: POR01, Purpose: publication, Format: 2colA

## **Guia do operador [Operator Guide]—**

# **Modelos de extração de limpeza com controles E-P Plus<sup>®</sup> e E-P Express<sup>®</sup> [Washer-extractor Models with E-P Plus<sup>®</sup> and E-P Express<sup>®</sup> Controls]**

**CUIDADO:** The information contained in this manual has been provided by Pellerin Milnor Corporation in the **English version only**. Milnor has tried to obtain a quality translation, but makes no claims, promises, or guarantees about the accuracy, completeness, or adequacy of the information contained in the non-English version.

Moreover, Milnor has made no attempt to verify the information contained in the non-English version, as it was completely done by a third party. Therefore, Milnor expressly denies liability for errors in substance or form and undertakes no responsibility for the reliance on, or consequences of, using the information in the non-English version.

**Under no circumstances shall Milnor or its agents or officers be liable for any direct, indirect, incidental, punitive, or consequential damages that may result in any way from the use or inability to use, or reliance on, the non-English version of this manual, or that result from mistakes, omissions, or errors in translation.**

**Leia o manual de segurança**

**Pode ser aplicado Milnor® produtos por número do modelo: [Applicable Milnor® products by model number:]**

30015T5X	30015V7J	30022H8J	30022T5X	30022V6J	30022VRJ	30022X8J
36021V5J	36021V7J	36026V5J	36026V7J	36026X8J	42026V6J	42026X7J
42030V6J	42032X7J	48040F7B	48040F7J	MWR12J5	MWR12X5	MWR16J5
MWR16X5	MWR18J4	MWR18J6	MWR18X4			

# Índice [English table of contents follows]

## Seções

## Imagens, tabelas e suplementos

### Capítulo 1. Descrição dos controles

- 1.1. Controles do operador nos modelos (/Z0E3} e E-P Express®** Imagem 1: Painel de controle típico  
(Documento BICJHF01)

### Capítulo 2. Funcionamento normal

- 2.1. Funcionamento normal da máquina** (Documento BICJVO03)

- 2.1.1. Iniciar aqui por segurança
- 2.1.2. Verifique as definições do alternador
- 2.1.3. Carregue a máquina
- 2.1.4. Selecionar a iniciar uma fórmula
- 2.1.5. Monitorar o funcionamento
- 2.1.6. Como encerrar uma fórmula em execução
- 2.1.7. Como reiniciar após perder energia
- 2.1.8. Descarregue a máquina

Suplemento 1: O atraso de segurança de inicialização

### Capítulo 3. Correção de erros

- 3.1. Mensagens de erro durante o funcionamento normal**  
(Documento BICJHT04)

# Table of Contents

Sections	Figures, Tables, and Supplements
<b>Chapter 1. Description of Controls</b>	
<b>1.1. Operator Controls on E-P Plus® and E-P Express® Models</b> (Document BICJHF01)	Figure 1: Typical Control Panel
<b>Chapter 2. Normal Operation</b>	
<b>2.1. Normal Machine Operation</b> (Document BICJVO03)	
2.1.1. Start Here for Safety	
2.1.2. Check Switch Settings	Supplement 1: The Power-up Safety Delay
2.1.3. Load the Machine	
2.1.4. Select and Start a Formula	
2.1.5. Monitor Operation	
2.1.6. How to Terminate a Running Formula	
2.1.7. How to Restart after Losing Power	
2.1.8. Unload the Machine	
<b>Chapter 3. Correcting Errors</b>	
<b>3.1. Error Messages During Normal Operation</b> (Document BICJHT04)	

# Capítulo 1

## Descrição dos controles

# Chapter 1

## Description of Controls

BICJHF01 (Published) Book specs- Dates: 20090831 / 20090831 / 20110207 Lang: POR01 Applic: CJV CJH CJF CJX

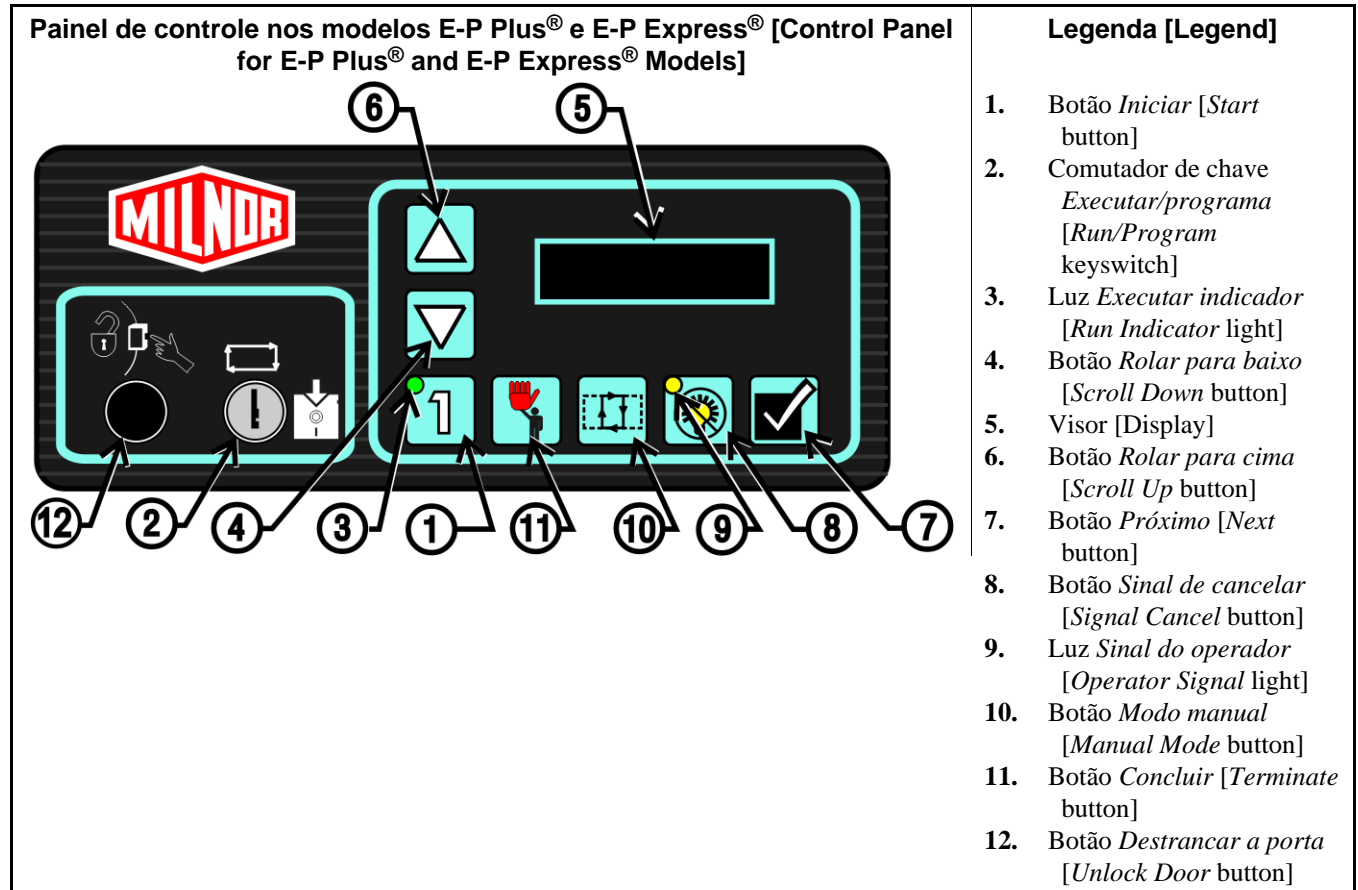
### 1.1. Controles do operador nos modelos (/Z0E3} e E-P Express®

Este documento descreve os controles do usuário durante o funcionamento normal da máquina. Para obter informações adicionais sobre outros controles mostrados em [Imagem 1](#), consulte o manual de referência.

### Operator Controls on E-P Plus® and E-P Express® Models

This document describes the user controls during normal machine operation. For additional information on other controls shown in [Figure 1](#), see the reference manual.

Imagem [Figure] 1: Painel de controle típico [Typical Control Panel]



**Visualização ou ação**  
[Display or Action]

**Explicação**

**Explanation**





- |              |  |  |
|--------------|--|--|
| <p>①</p>     | <p>Quando o visor disser <i>Executar a fórmula</i>, pressione este botão para iniciar a fórmula.</p>   | <p>When the display says <i>Run Formula</i>, press this button to start the formula.</p>                           |
| <p>☐ / ☒</p> | <p>Durante o funcionamento normal, o comutador de chaves <i>Executar/programa</i> deverá estar definido como ☐. Esta é a posição automática.</p> | <p>During normal operation, the <i>Run/Program</i> keyswitch must be set to ☐. This is the automatic position.</p> |
| <p>▲ / ▼</p> | <p>Utilize os botões <i>Rolar para cima</i> e <i>Rolar para baixo</i> para selecionar a fórmula desejada.</p>                                    | <p>Use the <i>Scroll Up</i> and <i>Scroll Down</i> buttons to select the desired formula.</p>                      |
| <p>☑</p>     | <p>O botão <i>Próximo</i> não é utilizado durante o funcionamento normal.</p>  | <p>The <i>Next</i> button is not used during normal operation.</p>   |



**Visualização ou ação**  
[Display or Action]

**Explicação**

**Explanation**

- |   |   |   |
|---|---|---|
|  | <p>O botão <i>Sinal de cancelar</i> silencia o sinal do operador emitido quando a fórmula é completada normalmente. Além disso, se o sinal do operador for programado com uma injeção química, adicione o produto químico e pressione o botão para reiniciar o funcionamento.</p> | <p>The <i>Signal Cancel</i> button silences the operator signal that sounds when a formula completes normally. Also, if an operator signal is programmed with a chemical injection, add the chemical and press this button to resume operation.</p> |
|  | <p>O botão <i>Manual</i> não é utilizado durante o funcionamento normal.</p>  | <p>The <i>Manual</i> button is not used during normal operation.</p>  |
|  | <p>O botão <i>Concluir</i> cancela todas as etapas restantes da fórmula atual e inicia o desligamento da máquina. Não foi possível reiniciar a fórmula.</p>   | <p>The <i>Terminate</i> button cancels all remaining steps in the current formula and starts the shutdown procedure for the machine. The formula can not be resumed.</p>  |
|  | <p>O botão <i>Deslancar a porta</i> permite abrir a porta se todas as outras condições de segurança tiverem sido atendidas.</p>   | <p>The <i>Unlock Door</i> button allows you to open the door if all other safety conditions are met.</p>  |

— Final de BICJHF01 —

— End of BICJHF01 —

## Capítulo 2

# Funcionamento normal

## Chapter 2

# Normal Operation

BICJVO03 (Published) Book specs- Dates: 20090831 / 20090831 / 20110207 Lang: POR01 Applic: CJV CJH CJF CJX

### 2.1. Funcionamento normal da máquina

### Normal Machine Operation

#### 2.1.1. Iniciar aqui por segurança

Este documento foi desenvolvido para lembrar ao operador do extrator de lavagem o que é necessário para operar esta máquina. Não tente operar esta máquina antes de um operador treinado explicar os detalhes a você.

#### Start Here for Safety

This document is designed to remind the person operating this washer-extractor what is required to operate this machine. Do not attempt to operate this machine before a trained operator has explained the details to you.



**PERIGO [1]: Riscos diversos**—Ações descuidadas do operador poderão matar ou ferir pessoal, danificar ou destruir a máquina, danificar propriedade e/ou anular a garantia.

**DANGER [1]: Multiple Hazards**—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.



**CUIDADO [2]: Riscos de eletrocução e queimaduras elétricas**—O contato com energia elétrica pode ferir seriamente ou matar. A energia elétrica estará presente no interior do gabinete a menos que o disjuntor principal da máquina esteja desligado.








**CAUTION [2]: Electrocution and Electrical Burn Hazards**—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Não destrave ou abra portas de quadros de energia.
- Saiba a localização do disjuntor principal da máquina e use-o em caso de emergência para cortar toda a energia elétrica da máquina.
- Não realize manutenção na máquina a menos que seja qualificado e autorizado. Você deve compreender claramente os riscos e como os evitar.

- Do not unlock or open electric box doors.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.

### 2.1.2. Verifique as definições do alternador

### Check Switch Settings

Visualização ou ação [Display or Action]	Explicação	Explanation
	Verifique se o <i>executar/programa</i> comutador de chave está em  .	Check that the <i>run/program</i> keyswitch is at  .
	Verifique se há alternadores <i>para de emergência</i> na posição <i>fora</i> .	Check that any <i>emergency stop</i> switches are in the <i>out</i> position.
	Verifique se o alternador mestre, se houver, está em  .	Check that the master switch, if provided, is at  .

#### Suplemento 1

##### O atraso de segurança de inicialização

Alguns Milnor® extratores de limpeza não utilizam um dispositivo de percepção da velocidade para verificar se a cesta parou de girar. Portanto, quando a energia começa a ser aplicada na máquina, ao menos 80 segundos deverão transcorrer antes que sejam tentadas quaisquer operações. Isto fornece tempo suficiente para a cesta desacelerar até parar completamente se o fornecimento de energia for interrompido quando a máquina estiver em extração de alta velocidade e retomado antes de a cesta parar.

#### Supplement 1

##### The Power-up Safety Delay

Some Milnor® washer extractors do not use a speed sensing device to verify that the basket has stopped rotating. Therefore, when power is first applied to the machine, at least 80 seconds must elapse before any further operations can be attempted. This provides sufficient time for the basket to coast to a complete stop if power was lost while the machine was in a high speed extract and restored before the basket stopped.

### 2.1.3. Carregue a máquina

Carregue a máquina até a capacidade avaliada e feche a porta da carga com segurança.

### Load the Machine

Load the machine to the rated capacity and securely close the loading door.

## 2.1.4. Selecionar a iniciar uma fórmula

## Select and Start a Formula

### Visualização ou ação [Display or Action]

```
EXECUTAR A FÓRMULA
00 OK PARA
DESLIGAMENTO
```

```
RUN FORMULA
00 OK TO POWER OFF
```



```
EXECUTAR A FÓRMULA
07 FÓRMULA NÚMERO 07
```

```
RUN FORMULA
07 FORMULA NUMBER 07
```



```
EXECUTAR A FÓRMULA
NÃO EXISTE
```

```
RUN FORMULA
DOES NOT EXIST
```

### Explicação

Isto é para o visor *Executar a fórmula*. Neste visor é possível desconectar o cabo de energia da máquina sem colocar em risco as peças eletrônicas. Também é possível selecionar uma fórmula para ser executada.

indica para frente/para trás em todas as 30 fórmulas.

Visualização de exemplo: *Fórmula 07* selecionado para executar

inicia a máquina com a fórmula selecionada.

indica que a fórmula selecionada para execução não foi programada. Esta visualização será exibida por três segundos.

### Explanation

This is the *Run Formula* display. From this display, you can disconnect power from the machine without risking damage to electronic parts, or you can select a formula to run.

indexes forward/backward through the 30 formulas.

Example display: *Formula 07* selected for running

starts the machine with the selected formula.

indicates that the formula selected for running has not been programmed. This display appears for three seconds.

## 2.1.5. Monitorar o funcionamento

## Monitor Operation

**Visualização ou ação**  
[Display or Action]

```
23:04 F02S01 02:37
TEMP A168/D170 NÍV 1
```

```
23:04 F02S01 02:37
TEMP A168/D170 LEV 1
```

```
23:04 STEP 01 02:37
TEMP A168/D170 VEL 0
```

```
23:04 STEP 01 02:37
TEMP A168/D170 SPD 0
```

```
23:04 F02S01 02:37
```

```
23:04 F02S01 02:37
```

```
TEMP A168/D170 NÍV 1
```

```
TEMP A168/D170 LEV 1
```

**Explicação**

Estas duas visualizações se alternam durante o funcionamento normal em alguns modelos E-P Plus<sup>®</sup>. Os modelos E-P Express<sup>®</sup> exibem outros dados sobre a etapa, mas não os dados de temperatura do banho.

STEP01 é a etapa atual.

EXTRACT indica que a máquina está extraíndo os bens.

TIMEHALT indica que o marcador de tempo foi interrompido por uma injeção química. O equipamento de fornecimento de químicos deveria ser instalado adequadamente para que este recurso funcione.

A temperatura nesta máquina E-P Plus<sup>®</sup> é medida em graus Fahrenheit ou Celsius, de acordo com a configuração da máquina.

A168 indica que a temperatura atual alcançada é de 168 graus. A temperatura será exibida apenas se a máquina possuir um controle de temperatura e estiver configurada de acordo.

**Explanation**

These two displays alternate during normal operation on some E-P Plus<sup>®</sup> models. E-P Express<sup>®</sup> models display other data about the step, but not bath temperature data.

STEP01 is the current step.

EXTRACT indicates that the machine is extracting the goods.

TIMEHALT indicates that the timer is stopped for a chemical injection. The chemical supply equipment must be properly installed for this feature to work.

Temperature in this E-P Plus<sup>®</sup> machine is measured in degrees Fahrenheit or Celsius, according to machine configuration.

A168 indicates that the current achieved temperature is 168 degrees. Temperature is displayed only if machine is equipped with and configured for temperature control.

**Visualização ou ação**  
[Display or Action]

VEL 0	NÍV 2
-------	-------

SPD 0	LEV 2
-------	-------

**Explicação**

D170 indica que a temperatura desejada para esta etapa é de 170 graus. A temperatura será exibida apenas se a máquina possuir um controle de temperatura e estiver configurada de acordo.

LEV 2 indica que o nível de banho alcançado é o 2 (Nível 2).

SPD 0 indica a velocidade de banho nesta etapa.

WAIT FOR LEVEL 2 H indica que o Nível 2 é o programado para esta etapa, mas ainda não foi alcançado. O H indica que a válvula de água quente está aberta; C indica água fria, e 3 indica água extra.

CHEM 03 será exibido quando o Químico 03 for injetado. O número de cada químico (até cinco poderão ser conectados) será exibido quando o material for injetado.

FINAL EXTRACT indica que a etapa em curso é a última da fórmula de limpeza.

**Explanation**

D170 indicates that the desired temperature for this step is 170 degrees. Temperature is displayed only if the machine is equipped with and configured for temperature control.

LEV 2 indicates that the bath level achieved is Level 2.

SPD 0 indicates the bath speed for this step.

WAIT FOR LEVEL 2 H indicates that Level 2 is programmed for this step, but is not yet achieved. The H indicates that the hot water valve is open; C indicates cold water, and 3 indicates extra water.

CHEM 03 is displayed when Chemical 03 is being injected. The number for each chemical (up to five may be connected) is displayed as the chemical is injected.

FINAL EXTRACT indicates that the step in progress is the final step of the wash formula.

**2.1.6. Como encerrar uma fórmula em execução**

**How to Terminate a Running Formula**

**Visualização ou ação**  
[Display or Action]



**Explicação**

Cancela a fórmula atual e faz a máquina retornar à exibição *Executar a fórmula* (ver [Seção 2.1.4 “Selecionar a iniciar uma fórmula”](#)).

**Explanation**

Cancels the current formula and returns the machine to the *Run Formula* display (see [Section 2.1.4 “Select and Start a Formula”](#)).

### 2.1.7. Como reiniciar após perder energia

O controle lembrará a fórmula e a etapa que estava sendo executada quando houver queda de energia ou quando o disjuntor de parede for desligado enquanto a máquina estiver no modo de funcionamento automático.

### How to Restart after Losing Power

The control remembers the formula and step it was executing if power fails or if the wall disconnect is turned off while the machine is operating in automatic mode.

**Visualização ou ação**  
[Display or Action]

```
PRESSIONE INCIAR
PARA EXECUTAR
ETAPA xx - FÓRMULA
yy
```

```
PRESS START TO RUN
STEP xx - FORMULA yy
```

**Explicação**

Na maioria dos modelos de máquina esta visualização será exibida quando a energia for recuperada. A fórmula e a etapa que estavam em andamento quando o fornecimento de energia foi interrompido serão exibidas.

**Explanation**

On most machine models, this display appears when power is restored. The formula and step which were in progress when power was interrupted are shown.



A fórmula será reiniciada a partir do ponto exibido na tela. Se a falha de energia ocorrer durante uma etapa de banho, o nível e a temperatura (se controlados) deverão ser alcançados novamente, ainda que estivessem no nível desejado antes da queda de energia. Todos os comandos químicos deverão ser injetados novamente.

Resumes the formula at the displayed formula and step. If the outage occurred in a bath step, level and temperature (if commanded) must again be satisfied, even if these were already satisfied before power was lost. Any commanded chemicals will be injected again.

Se a falha elétrica ocorrer durante o estágio de drenagem de uma etapa de banho, a etapa de banho será repetida, e depois seguida para a próxima etapa de comando.

If the outage occurred during the drain part of a bath step, the bath step will be repeated, then followed by the next commanded step.

Se a falha elétrica ocorrer durante uma etapa de extração, o banho anterior será repetido antes que a etapa de extração se inicie.

If the outage occurred during an extract step, the previous bath will be repeated before the extract step begins.

### 2.1.8. Descarregue a máquina



**PERIGO [3]: Riscos de se prender e de amputação**—O contato com bens em processamento poderá fazer com que eles se enroscuem no seu corpo ou membros, desmembrando você. Os bens são, normalmente, isolados pela porta fechada do cilindro.

### Unload the Machine

**DANGER [3]: Entangle and Sever Hazards**—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember you. The goods are normally isolated by the locked cylinder door.

- Não toque os bens dentro ou pendurados parcialmente fora do cilindro girando.

Quando a fórmula terminar ou for encerrada, o cilindro desacelerará por 25 segundos se a última etapa for a de banho. Caso a última etapa tenha sido de extração, o tempo de desaceleração poderá se estender a 180 segundos. Não tente abrir a porta logo.

- Do not touch goods inside or hanging partially outside the turning cylinder.

When the formula ends or is terminated, the cylinder coasts for 25 seconds if the last step was a bath step. If the last step was an extract, the coast time may be as much as 180 seconds. Do not attempt to open the door early.

**Visualização ou ação**  
[Display or Action]

DESTRANCAMENTO DA  
PORTA  
AGUARDE

UNLOCKING THE DOOR  
PLEASE WAIT

AGUARDANDO O  
DESCARREGAMENTO  


WAITING TO UNLOAD  


**Explicação**

exibido durante os últimos 15 segundos de desaceleração, ou durante todo o tempo de desaceleração se a fórmula tiver sido encerrada manualmente.

Ao final do tempo de desaceleração, o operador soará o alarme.



Silencia o alarme do operador. A porta será destrancada para que a máquina possa ser carregada.

**Explanation**

display during the last 15 seconds of coast, or during the entire coast time if the formula was manually terminated.

At the end of the coast time, the operator alarm sounds.

Silences the operator alarm. The door unlocks so you can unload the machine.



## Capítulo 3

# Correção de erros

## Chapter 3

# Correcting Errors

BICJHT04 (Published) Book specs- Dates: 20090831 / 20090831 / 20110207 Lang: POR01 Applic: CJV CJH CJF CJX

### 3.1. Mensagens de erro durante o funcionamento normal

Caso seja exibida uma mensagem de erro na linha inferior do visor enquanto a máquina estiver em funcionamento, o marcador de tempo na linha superior interromperá a contagem. Quando o erro for corrigido, o marcador de tempo retomará a contagem. Para solucionar a maior parte dos problemas, suspenda a fórmula em funcionamento e interrompa o fornecimento de energia. Não conclua a fórmula se está estiver para ser reiniciada depois que o erro for corrigido. Consulte o manual de referência para obter mais informações.

### Error Messages During Normal Operation

If an error message appears on the bottom line of the display while the machine is running, the timer shown on the top line will stop counting. When the error is corrected, the timer resumes counting down. To troubleshoot most errors, suspend the formula in progress and turn power off. Do not terminate the formula if it is to be resumed after the error is corrected. See the reference manual for more information.

**Visualização ou ação**  
[Display or Action]

NÍVEIS AINDA FEITOS

LEVELS STILL MADE

MUITO LENTO PARA  
PREENCHER

TOO LONG TO FILL

MUITO LENTO PARA  
EVAPORAR

TOO LONG TO STEAM

MUITO LENTO PARA  
RESFRIAR

TOO LONG TO COOL

**Explicação**

O microprocessador ainda está recebendo informações de que há níveis sendo feitos logo antes ou durante a etapa de extração, ou imediatamente após o preenchimento para a etapa de banho. O erro se eliminará se o nível for perdido.

O tempo de preenchimento do nível excedeu 10 minutos. Verifique as válvulas de água, os filtros, as linhas de fornecimento e a pressão da água. A máquina continuará a preencher até alcançar o nível. Quando isso acontecer, o erro será automaticamente excluído e o funcionamento normal será reiniciado.

**Apenas modelos E-P.** O tempo máximo configurado para evaporar até a temperatura desejada foi excedido. Verifique a válvula de vapor, o filtro, principal tubo de vaporização e pressão, etc. A evaporação continuará até que seja atingida a temperatura, quando o erro será automaticamente excluído e o funcionamento normal será reiniciado.

**Apenas modelos E-P.** O tempo máximo configurado para resfriar até a temperatura desejada foi excedido. Verifique a válvula e o filtro de resfriamento, a pressão da água fria e a posição da válvula Vernier na entrada de resfriamento. O resfriamento continuará até que seja atingida a temperatura desejada, quando o erro automaticamente será excluído.

**Explanation**

The microprocessor is still receiving information that a level is made just before or during an extract step, or immediately before the fill for a bath step. This error is self-clearing when level is lost.

Time to fill to level exceeded 10 minutes. Check the water valves, strainers, supply lines, and water pressure. The machine will continue to fill until level is reached, at which time the error will automatically clear and normal operation will resume.

**E-P Plus models only.** The configured maximum time to steam up to the desired temperature has been exceeded. Check the steam valve, strainer, main steam header and pressure, etc. Steaming will continue until temperature is achieved, when the error will automatically clear and normal operation will resume.

**E-P Plus models only.** The configured maximum time to cool down to the desired temperature has been exceeded. Check the cooldown valve and strainer if equipped, cold water pressure, and position of vernier valve on cooldown inlet. Cooldown will continue until the desired temperature is achieved, when the error will automatically clear.

**Visualização ou ação**  
[Display or Action]

MUITO LENTO PARA  
DRENAR

TOO LONG TO DRAIN

VERIFICAR A SONDA

CHECK PROBE

FALHA EXTERNA

EXTERNAL FAULT

**Explicação**

A máquina não realizou a drenagem da forma adequada no tempo de drenagem estabelecido. Este erro que se corrige automaticamente será excluído quando o nível de água no cesto estiver baixo o suficiente para iniciar a próxima operação.

**Apenas modelos E-P.**Esta mensagem de erro indica que a resistência da sonda de temperatura está fora do intervalo especificado. Teste a sonda desconectando as pontas da placa do processador e verificando a resistência com um ohmômetro digital preciso. A resistência entre as duas pontas deverá estar entre 2K e 35K Ohms. A resistência entre a ponta e o chão deverá ser infinita.

Na maioria das máquinas, este erro indica que houve falha na injeção química programada, geralmente porque o sistema de fornecimento químico está vazio. Quando os produtos químicos são adicionados e podem ser injetados, este erro é automaticamente excluído, permitindo que o funcionamento seja reiniciado.

Nos modelos 48040F7J/F7B este erro indicará que a pressão de ar no mancal está abaixo da mínima exigida para ajudar a proteger o mancal contra contaminação por água.

**Explanation**

The machine did not drain properly in the allotted drain time. This self-correcting error will clear when the water level in the basket is low enough to begin the next operation.

**E-P Plus models only.**This error message indicates that the resistance of the temperature probe is outside the specified range. Test the probe by disconnecting the probe leads from the processor board and checking the resistance with an accurate digital ohmmeter. Resistance between the two leads must be between 2K and 35K Ohms. Resistance between each lead and ground must be infinite.

On most machines, this error indicates that the programmed chemical injection failed, usually because the chemical supply system is empty. When chemicals are added and can be injected, this error clears automatically, allowing operation to resume.

On 48040F7J/F7B models, this error indicates that the bearing air pressure is below the minimum required to help protect the bearing from water contamination.

**Visualização ou ação**  
[Display or Action]

PRENSA DE CHAPA.  
FALHA

BRAKE PRESS. FAULT

TRÊS CABOS  
DEBILITADOS

THREE WIRE DISABLED

FALHA DO INVERSOR

INVERTER FAULT

**Explicação**

Este erro aparecerá apenas nos modelos de máquinas equipados com um freio de cilindro. Esta mensagem indicará que o freio está engatado, quando deveria estar desengatado. Isto geralmente ocorre porque a máquina não está recebendo pressão de ar suficiente para abrir o freio, que normalmente está fechado. Verifique o fornecimento de ar comprimido da planta.

O relé de três cabos está desenergizado. Este relé fornece energia de circuito de controle à máquina. Uma vez energizado ao momentaneamente pressionar o *Iniciar* botão (1), permanecerá energizado por seus próprios contatos, junto com as sobrecargas do motor, as trancas da porta, etc. Caso um desses contatos seja aberto momentaneamente, a máquina cessará e será exibida esta mensagem. Este erro só poderá ser excluído ao pressionar o *Iniciar* botão (1). Apenas assim o erro será excluído.

Esta mensagem de erro será exibida se o microprocessador não receber uma entrada do inversor até 14 segundos após o início da fórmula. Depois de 14 segundos sem uma entrada do inversor, o marcador de tempo cessará, a cesta ficará imóvel e a válvula de drenagem se abrirá. Para recobrar, pressione a *Próximo* tecla (2).

**Explanation**

This error appears only on machine models equipped with a cylinder brake. The message indicates that the brake is engaged when it should be disengaged. This is usually because the machine is not receiving sufficient air pressure to open the normally-closed brake. Check the plant compressed air supply.

The three-wire relay de-energized. This relay provides control circuit power to the machine. Once energized by momentarily depressing the *Start* button (1), it is held energized by its own normally open contacts, along with motor overloads, door interlocks, etc. Should any of these contacts open even momentarily, the machine stops and this display appears. This error can only be cleared by depressing the *Start* button (1), and only then if the error has been cleared.

This error message appears if the microprocessor does not receive an input from the inverter within 14 seconds of the beginning of the formula. After 14 seconds without an inverter input, the timer stops, the basket is stationary, and the drain valve opens. To recover, press the *Next* key (2).

**Visualização ou ação**  
[Display or Action]

A VIBRAÇÃO DE SW FOI ATIVADA SEQUÊNCIA DE RECUPERAÇÃO
--

VIBRATION SW TRIPPED RECOVERY SEQUENCE
---

**Explicação**

Quando o alternador de vibração se fechar, o marcador de tempo cessará. Depois de 45 a 85 segundos (120 segundos nos modelos 42032F7J), a cesta reverterá para a velocidade de limpeza à medida que o cilindro se encher de água. Ao atingir o nível baixo, o cilindro reverterá para um minuto adicional em velocidade de limpeza e depois acelerará para a velocidade de extração.

**Explanation**

When the vibration switch closes, the timer stops. After 45 to 85 seconds (120 seconds on 42032F7J models), the basket reverses at wash speed as the cylinder fills with water. When low level is achieved, the cylinder reverses for one additional minute at wash speed, then accelerates to extract speed.

— Final de BICJHT04 —

— End of BICJHT04 —

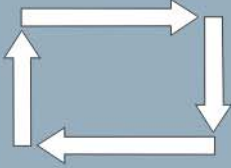


**Section**  
**Türkçe**

**8**







Published Manual Number: MQCJVO01TR

- Specified Date: 20090831
- As-of Date: 20090831
- Access Date: 20100519
- Depth: Detail
- Custom: n/a
- Applicability: CJV CJH CJF CJX
- Language Code: TUR01, Purpose: publication, Format: 2colA

## Kullanıcı rehberi [Operator Guide]—

# E-P Plus® ve E-P Express® kontrollü yıkama-sıkma makinesi modelleri [Washer-extractor Models with E-P Plus® and E-P Express® Controls]

**DİKKAT:** Bu el kitabında bulunan bilgiler, Pellerin Milnor Corporation tarafından yalnızca **İngilizce olarak sağlanmıştır**. Milnor kaliteli bir çeviri sunmaya çalışmıştır, fakat İngilizce olmayan sürümde bulunan bilgilerin doğruluğu, eksiksizliği veya yeterliliği hakkında hiçbir iddiada bulunmaz, söz veya garanti vermez.

Ayrıca, İngilizce olmayan sürümde bulunan bilgiler tamamen bir üçüncü parti tarafından sağlandığı için, Milnor bu bilgileri doğrulamak amacıyla bir girişimde bulunmamıştır. Bundan dolayı, Milnor içerik veya biçimdeki hatalarla ilgili yükümlülüğü açıkça reddeder ve İngilizce olmayan sürümde bulunan bilgilere güvenilmesiyle veya bu bilgilerin kullanılmasının sonuçlarıyla ilgili hiçbir sorumluluk almaz.

**Milnor veya araçları ya da çalışanları, bu el kitabının İngilizce olmayan sürümünün kullanılması veya kullanılmaması ya da bu el kitabına güvenilmesi sonucu herhangi bir şekilde ortaya çıkabilecek veya çevirideki yanlışlıklardan, eksikliklerden ya da hatalardan kaynaklanan doğrudan, dolaylı, ceza gerektirici veya sonuç olarak ortaya çıkan zararlardan hiçbir şekilde sorumlu tutulamaz.**

**Güvenlik kitabını oku**

PELLERIN MILNOR CORPORATION POST OFFICE BOX 400, KENNER, LOUISIANA 70063 - 0400, U.S.A.

**Uygulanabilir Milnor® Model numarasına göre ürünler: [Applicable Milnor® products by model number:]**

30015T5X	30015V7J	30022H8J	30022T5X	30022V6J	30022VRJ	30022X8J
36021V5J	36021V7J	36026V5J	36026V7J	36026X8J	42026V6J	42026X7J
42030V6J	42032X7J	48040F7B	48040F7J	MWR12J5	MWR12X5	MWR16J5
MWR16X5	MWR18J4	MWR18J6	MWR18X4			

# İçindekiler Tablosu [English table of contents follows]

Bölümler	Rakamlar, Tablolar, ve Ekler
<b>Bölüm 1. Kontrollerin Tanımı</b>	
<b>1.1. E-P Plus® ve E-P Express® Modellerinde Operatör Kontrolleri</b> (Doküman BICJHF01)	Rakam 1: Tipik kontrol paneli
<b>Bölüm 2. Normal Operasyon</b>	
<b>2.1. Makinenin Normal Çalıştırılması</b> (Doküman BICJVO03)	
2.1.1. Güvenlik için buradan başlayın	
2.1.2. Switch set değerlerini kontrol edin.	Ek 1: Güç devrede iken Emniyet gecikmesi
2.1.3. Makineyi Yükle	
2.1.4. Programı Seçme ve Baslatma	
2.1.5. İşlemin İzlenmesi ve anlamları	
2.1.6. Çalışan bir program nasıl durdurulur	
2.1.7. Enerji kesildiğinde yeniden başlatma	
2.1.8. Makinenin boşaltılması	
<b>Bölüm 3. Hataları Düzeltme</b>	
<b>3.1. Normal operasyonda hata mesajı</b> (Doküman BICJHT04)	

# Table of Contents

Sections	Figures, Tables, and Supplements
<b>Chapter 1. Description of Controls</b>	
<b>1.1. Operator Controls on E-P Plus® and E-P Express® Models</b> (Document BICJHF01)	Figure 1: Typical Control Panel
<b>Chapter 2. Normal Operation</b>	
<b>2.1. Normal Machine Operation</b> (Document BICJVO03)	
2.1.1. Start Here for Safety	
2.1.2. Check Switch Settings	Supplement 1: The Power-up Safety Delay
2.1.3. Load the Machine	
2.1.4. Select and Start a Formula	
2.1.5. Monitor Operation	
2.1.6. How to Terminate a Running Formula	
2.1.7. How to Restart after Losing Power	
2.1.8. Unload the Machine	
<b>Chapter 3. Correcting Errors</b>	
<b>3.1. Error Messages During Normal Operation</b> (Document BICJHT04)	

# Bölüm 1

## Kontrollerin Tanımı

# Chapter 1

## Description of Controls

BICJHF01 (Published) Book specs- Dates: 20090831 / 20090831 / 20100519 Lang: TUR01 Applic: CJV CJH CJF CJX

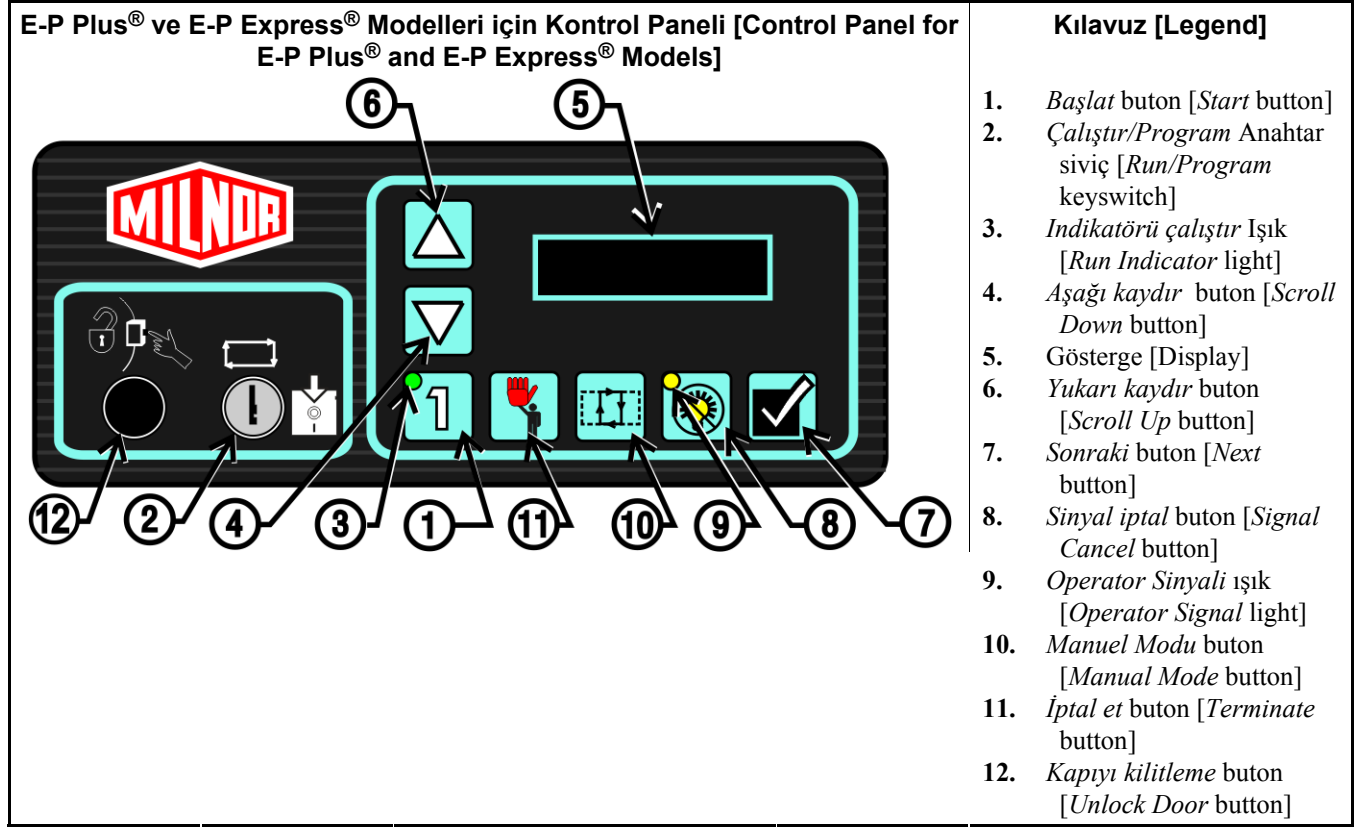
### 1.1. E-P Plus® ve E-P Express® Modellerinde Operatör Kontrolleri

Bu doküman kullanıcının normal makine operasyonunda kontrol ünitelerinin kullanımını tarif eder. Diğer bilgiler için [Rakam 1](#), referans manuele bakınız.

### Operator Controls on E-P Plus® and E-P Express® Models

This document describes the user controls during normal machine operation. For additional information on other controls shown in [Figure 1](#), see the reference manual.

Rakam [Figure] 1: Tipik kontrol paneli [Typical Control Panel]



Göster veya uygula  
[Display or Action]

Açıklama

Explanation

1

Gösterge *Formulayı çalıştır* söylediğinde bu butona bas ve formulayı başlat.

When the display says *Run Formula*, press this button to start the formula.

☐ / ☒

Normal operasyonda, *Çalıştır/Program* bu ana siviç B mutlaka bu pozisyonda olmalıdır.

During normal operation, the *Run/Program* keyswitch must be set to ☐. This is the automatic position.

▲ / ▼

*Yukarı kaydır* bunu kullan ve *Aşağı kaydır* butonları istediğin formulayı seçmek için kullan.

Use the *Scroll Up* and *Scroll Down* buttons to select the desired formula.

☑

*Sonraki* bu buton normal operasyonda kullanılmaz.

The *Next* button is not used during normal operation.

☒

*Sinyal iptali* Bu buton program bittiğinde bitiş sinyalini susturur. Eğer bu operator sinyali kimyasal enjeksiyon için de ayarlanmışsa, kimyasalı ilave edin ve bu butona basın program devam etsin.

The *Signal Cancel* button silences the operator signal that sounds when a formula completes normally. Also, if an operator signal is programmed with a chemical injection, add the chemical and press this button to resume operation.

**Göster veya uygula**  
[Display or Action]**Açıklama****Explanation**

*Manuel* Bu buton normal operasyonda kullanılmaz.

The *Manual* button is not used during normal operation.



*İptal et.* Bu buton yıkama programının tüm kalan aşamalarını iptal eder ve makineyi kapatma prosedürünü başlatır.

The *Terminate* button cancels all remaining steps in the current formula and starts the shutdown procedure for the machine. The formula can not be resumed.



*Kapıyı kilitleme* Bu buton diğer tüm emniyet koşulları yerine getirilmişse kapıyı açmanıza izin verir.

The *Unlock Door* button allows you to open the door if all other safety conditions are met.

— Sonu BICJHF01 —

— End of BICJHF01 —

## Bölüm 2

# Normal Operasyon

## Chapter 2

# Normal Operation

BICJVO03 (Published) Book specs- Dates: 20090831 / 20090831 / 20100519 Lang: TUR01 Applic: CJV CJH CJF CJX

### 2.1. Makinenin Normal Çalıştırılması Normal Machine Operation

#### 2.1.1. Güvenlik için buradan başlayın

Bu doküman, ile makineyi çalıştıracak personelin gerek duyacağı bilgileri içerir. Size detaylı olarak anlatılmadan makineyi kullanmaya girişmeyin.



**TEHLİKE [1]: Çoklu Tehlike**—Yetkisiz ve dikkatsiz kullanıcıların makineye müdahaleleri, kişisel kazalara, ölümlere sebep olabilir ve ayrıca makineye kalıcı hasar verebilir, bu durum garanti şartlarını geçersiz kılar.



**DİKKAT [2]: Elektrik çarpması ve kısa devre yangın Tehlikesi**—Elektrik ile temas etmeyin. Ölüm veya ciddi kalıcı sakatlıklara sebep olabilir. Makinenin ana şalteri açık iken elektrik panosuna müdahale etmeyin. Panoda çalışma yapmadan önce mutlaka ana şalteri kapatınız.

- Elektrik panosu kapaklarını açmayın yada kapatmayın.
- Makinenin ana şalterinin nerede olduğunu öğreniniz ve acil müdahalelerde nereden kapatacağınızı biliniz.
- Bilgisiz ve yetkisiz durumda müdahale etmeyiniz. Tehlikelerin açıkça farkında olmalısınız ve nasıl yok edileceğini bilmelisiniz.

#### Start Here for Safety

This document is designed to remind the person operating this washer-extractor what is required to operate this machine. Do not attempt to operate this machine before a trained operator has explained the details to you.

**DANGER [1]: Multiple Hazards**—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.







**CAUTION [2]: Electrocutation and Electrical Burn Hazards**—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Do not unlock or open electric box doors.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.
- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.



## 2.1.2. Switch set değerlerini kontrol edin.

## Check Switch Settings

Göster veya uygula [Display or Action]	Açıklama	Explanation
	Anahtarlı <i>çalıştır/program</i> switchinin <b>B</b> konumunda olduğunu kontrol edin.	Check that the <i>run/program</i> keyswitch is at  .
	Bütün <i>acil durum durdurma</i> acil stop switchlerinin açık <i>çıkış</i> pozisyonunda olduğunu kontrol edin.	Check that any <i>emergency stop</i> switches are in the <i>out</i> position.
	Ana şalterin  pozisyonunda olmasını sağla.	Check that the master switch, if provided, is at  .

### Ek 1

#### Güç devrede iken Emniyet gecikmesi

Bazı Milnor® yıkama sıkma makinelerinde, tamburun dönmesinin durduğunu doğrulayan bir hız sensörü bulunmaz. Bundan dolayı makineye ilk defa enerji verildiğinde herhangi bir işlem olmaksızın makinenin devrelerine 80 saniye boyunca enerji gelmez. Bu sayede makine yüksek devir sıkmada iken enerji kesilmesi ve tambur daha durmadan enerjinin geri gelmesi halinde tamburun tamamen durması için yeterli zaman sağlar.

### Supplement 1

#### The Power-up Safety Delay

Some Milnor® washer extractors do not use a speed sensing device to verify that the basket has stopped rotating. Therefore, when power is first applied to the machine, at least 80 seconds must elapse before any further operations can be attempted. This provides sufficient time for the basket to coast to a complete stop if power was lost while the machine was in a high speed extract and restored before the basket stopped.

## 2.1.3. Makineyi Yükle

Makineyi belirtilen kapasite yükle, kapağın emniyetli kapandığından emin ol.

## Load the Machine

Load the machine to the rated capacity and securely close the loading door.

## 2.1.4. Programı Seçme ve Baslatma Select and Start a Formula

Göster veya uygula [Display or Action]	Açıklama	Explanation
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">                     RUN FORMULA 00 OK TO POWER OFF                 </div> <div style="border: 1px solid black; padding: 2px;">                     RUN FORMULA 00 OK TO POWER OFF                 </div>	Bu <i>Run Formula</i> ekran görüntüsüdür. Bu ekranda iken, makinenin enerjisini elektronik parçalara zarar vermeden kesebilirsiniz veya herhangi bir programı çalıştırabilirsiniz.	This is the <i>Run Formula</i> display. From this display, you can disconnect power from the machine without risking damage to electronic parts, or you can select a formula to run.
▲ / ▼	Yukarı/Aşağı tuşları ile 30 Formula/program listelenebilir.	indexes forward/backward through the 30 formulas.
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">                     RUN FORMULA 07 FORMULA NUMBER 07                 </div> <div style="border: 1px solid black; padding: 2px;">                     RUN FORMULA 07 FORMULA NUMBER 07                 </div>	Örnek Ekran: <i>Formül 07</i> çalıştırmak için seçilen.	Example display: <i>Formula 07</i> selected for running
1	Seçilmiş olan Formula/program ile makineyi çalıştırır.	starts the machine with the selected formula.
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">                     RUN FORMULA GEÇERSİZ PROGRAM                 </div> <div style="border: 1px solid black; padding: 2px;">                     RUN FORMULA DOES NOT EXIST                 </div>	Seçilmiş olan Formula/programın mevcut olmadığını ifade eder. Bu ekran 3 saniye boyunca görünür.	indicates that the formula selected for running has not been programmed. This display appears for three seconds.

## 2.1.5. İşlemin İzlenmesi ve anlamları Monitor Operation

Göster veya uygula [Display or Action]	Açıklama	Explanation
<pre>23:04 F02S01 02:37 TEMP A168/D170 LEV 1</pre>	Bazı E-P Plus® modellerinde bu iki ekran normal işlemde değişir. E-P Express® modelleri adım hakkındaki diğer verileri gösterir ancak yıkama ısı verilerini göstermez.	These two displays alternate during normal operation on some E-P Plus® models. E-P Express® models display other data about the step, but not bath temperature data.
<pre>23:04 STEP 01 02:37 TEMP A168/D170 SPD 0</pre>	STEP01 geçerli işlemi ifade eder.	STEP01 is the current step.
<pre>23:04 F02S01 02:37</pre>	EXTRACT makinenin sıkma işleminde olduğunu gösterir.	EXTRACT indicates that the machine is extracting the goods.
<pre>23:04 F02S01 02:37</pre>	TIMEHALT Kimyasal dozajlama için sürenin durduğunu ifade eder. Bu özelliğin çalışabilmesi için kimyasal dozaj sistemlerinin uygun monte edilmiş olması gerekir.	TIMEHALT indicates that the timer is stopped for a chemical injection. The chemical supply equipment must be properly installed for this feature to work.
<pre>TEMP A168/D170 LEV 1</pre>	Bu E-P Plus® makinesinde, makine konfigürasyonuna göre sıcaklık Fahrenheit veya Santigrat olarak ölçülür.	Temperature in this E-P Plus® machine is measured in degrees Fahrenheit or Celsius, according to machine configuration.
<pre>TEMP A168/D170 LEV 1</pre>	A168 makinedeki sıcaklığın 168 ( fahrenheit)dereceye ulaştığını gösterir. Sıcaklık sadece sıcaklık kontrol ünitesi bulunan makinelerde okunabilir.	A168 indicates that the current achieved temperature is 168 degrees. Temperature is displayed only if machine is equipped with and configured for temperature control.

**Göster veya uygula**  
[Display or Action]

**Açıklama**

**Explanation**

SPD 0	LEV 2
SPD 0	LEV 2

D170 istenen sıcaklığın 170 derece ( fahrenheit) olduğunu gösterir. Sıcaklık sadece sıcaklık kontrol ünitesi bulunan makinelerde okunabilir.

D170 indicates that the desired temperature for this step is 170 degrees. Temperature is displayed only if the machine is equipped with and configured for temperature control.

LEV 2 yıkama su seviyesinin 2. seviyeye ulaştığını gösterir.

LEV 2 indicates that the bath level achieved is Level 2.

SPD 0 O işlemdeki yıkama hızını gösterir.

SPD 0 indicates the bath speed for this step.

WAIT FOR LEVEL 2 H O işlem için seviyenin Level 2 olarak programlandığını, ancak henüz ulaşmadığını gösterir. H sıcak su valfinin, C soğuk su valfinin, 3 ise ilave su valfinin açık olduğunu gösterir.

WAIT FOR LEVEL 2 H indicates that Level 2 is programmed for this step, but is not yet achieved. The H indicates that the hot water valve is open; C indicates cold water, and 3 indicates extra water.

CHEM 03 üçüncü gözden kimyasal aldığını gösterir. En fazla 5 adete kadar bağlanan kimyasal gözlerden, hangisi devrede ise o görülür.

CHEM 03 is displayed when Chemical 03 is being injected. The number for each chemical (up to five may be connected) is displayed as the chemical is injected.

FINAL EXTRACT yıkama işleminin son sıkma aşamasında olduğunu ifade eder.

FINAL EXTRACT indicates that the step in progress is the final step of the wash formula.

## 2.1.6. Çalışan bir program nasıl durdurulur

## How to Terminate a Running Formula

**Göster veya uygula**  
[Display or Action]

**Açıklama**

**Explanation**



Mevcut programı iptal etmek ekranı *Çalıştırma Formülü* konumuna getirir. (bakınız Bölüm 2.1.4 “Programı Seçme ve Baslatma”).

Cancels the current formula and returns the machine to the *Run Formula* display (see Section 2.1.4 “Select and Start a Formula”).

### 2.1.7. Enerji kesildiğinde yeniden başlatma

Makine otomatik konumda çalışırken enerji kesildiğinde, kaldığı yerdeki aşamayı hafızasında tutar ve enerji tekrar geldiğinde oradan devam eder.

**Göster veya uygula**  
[Display or Action]

```
PRESS START TO RUN
STEP xx - FORMULA yy
```

```
PRESS START TO RUN
STEP xx - FORMULA yy
```

**Açıklama**

Bazı makinelerde enerji gidip yeniden geldiğinde bu ekran görülür. Ekran, enerji kesildiğinde programın hangi aşamada kaldığını gösterir.

1

Ekrandaki program kaldığı aşamadan devam eder. Enerji kesilmeden önce tamamlanmış olsa dahi su seviyesi ve sıcaklık kontrol işlemleri yeniden devreye girer. Bu aşamada gerekli olan kimyasal yeniden enjekte edilir.

Herhangi bir drenaj (boşaltma) aşamasında enerji kesilmiş ise tekrar geldiğinde program işlemi tekrarlar ve bir sonraki aşamadan devam eder.

Sıkma aşamasında enerji kesilmesi halinde bir önceki aşama tekrarlanır ve kaldığı yerden devam eder.

**Explanation**

On most machine models, this display appears when power is restored. The formula and step which were in progress when power was interrupted are shown.

Resumes the formula at the displayed formula and step. If the outage occurred in a bath step, level and temperature (if commanded) must again be satisfied, even if these were already satisfied before power was lost. Any commanded chemicals will be injected again.

If the outage occurred during the drain part of a bath step, the bath step will be repeated, then followed by the next commanded step.

If the outage occurred during an extract step, the previous bath will be repeated before the extract step begins.

### 2.1.8. Makinenin boşaltılması



**TEHLİKE 3: Dolanma ve Yırılma**

**Tehlikeleri**—Makinenin içerisinde bulunan çamaşırların boşaltılması esnasında çamaşırların vücudunuza dolanmasına dikkate ediniz.

Boşaltma işlemi dikkatlice ve acele etmeden yapınız.

- Çamaşırların boşaltılmasında kısmı olarak çıkartıp ucunu herhangi bir yere asmayın, takmayın.

Program bittiğinde veya herhangi bir yıkama aşamasında kesildiğinde tambur 25 sn. dönmeye devam eder. Eğer bu işlem bir sıkma aşamasında

### Unload the Machine

**DANGER 3: Entangle and Sever**

**Hazards**—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember you. The goods are normally isolated by the locked cylinder door.

- Do not touch goods inside or hanging partially outside the turning cylinder.

When the formula ends or is terminated, the cylinder coasts for 25 seconds if the last step was a bath step. If the last step was an

## Bölüm 2. Normal Operasyon

olur ise tambur 180 saniye dönmeye devam eder. Bu aşamada kapıyı açmak için zorlamayın.

extract, the coast time may be as much as 180 seconds. Do not attempt to open the door early.

### Göster veya uygula

[Display or Action]

KAPININ AÇILMASI  
İÇİN  
LÜTFEN BEKLEYİN

UNLOCKING THE DOOR  
PLEASE WAIT

BOŞALTMA İÇİN  
BEKLİYOR

WAITING TO UNLOAD



### Açıklama

Program bittiğinde veya herhangi bir yıkama aşamasında kesildikten sonra ekranda 15 sn. boyunca görülür.

Programın sonunda operatörü uyarmak için alarm sesi duyulur.

Alarmı durdurmak kapı kilidini açar, böylece makineyi boşaltabilirsiniz.

### Explanation

display during the last 15 seconds of coast, or during the entire coast time if the formula was manually terminated.

At the end of the coast time, the operator alarm sounds.

Silences the operator alarm. The door unlocks so you can unload the machine.

— Sonu BICJVO03 —

— End of BICJVO03 —

## Bölüm 3

# Hataları Düzeltme

## Chapter 3

# Correcting Errors

BICJHT04 (Published) Book specs- Dates: 20090831 / 20090831 / 20100519 Lang: TUR01 Applic: CJV CJH CJF CJX

### 3.1. Normal operasyonda hata mesajı

Makine çalışırken eğer hata mesajı göstergenin en alt satırında belirmişse, göstergenin üst sırasındaki timer saymayı durduracaktır. Hata düzeltildiğinde , timer kaldığı yerden geri sayıma devam eder. Hataların önemli bir kısmı, programı bekletmeye alarak, makine elektriği kapatılır. Hata düzeltildiğinde devam edilecekse programı/formulayı iptal etmeyin. Detaylı bilgi için referans manuele bakınız.

### Error Messages During Normal Operation

If an error message appears on the bottom line of the display while the machine is running, the timer shown on the top line will stop counting. When the error is corrected, the timer resumes counting down. To troubleshoot most errors, suspend the formula in progress and turn power off. Do not terminate the formula if it is to be resumed after the error is corrected. See the reference manual for more information.

### Bölüm 3. Hataları Düzeltme

#### Göster veya uygula [Display or Action]

LEVELS STILL MADE

LEVELS STILL MADE

SU ALIMI ÇOK UZUN

TOO LONG TO FILL

BUHAR ISITMA ÇOK  
UZUN

TOO LONG TO STEAM

SOĞUTMA SÜRESİ ÇOK  
UZUN

TOO LONG TO COOL

#### Açıklama

Mikroprosesör sıkma aşaması hemen öncesi veya sıkma aşamasında olduğuna ilişkin hala bilgi alıyorsa, veya yıkama aşamasından hemen önceki doluma aşamasında. Bu hata, aşama kaybolduğunda kendi kendini temizlemez.

Su dolum aşaması 10 dakikadır. Su basıncını, su borularını, çek valfleri gibi aksamaları kontrol ediniz. Seviyeye gelinceye kadar makine su almaya devam edecek, dolum gerçekleştiğinde zamana bağlı kalmaksızın bu hata ortadan kalkacak ve program kaldığı yerden devam edecektir.

**Sadece E-P Plus modelleri.**İstenen sıcaklığa ulaşabilmek için konfigüre edilen maksimum süre aşılmıştır. Buhar valflerini, buhar kazanını, ana buhar kolektörünü ve basıncını, vb. kontrol edin. İstenen sıcaklığa ulaşmaya kadar buhar üretimi devam eder; hata otomatik olarak ortadan kalktığına işlem kaldığı yerden devam eder.

**Sadece E-P Plus modelleri.**İstenen sıcaklığa soğutmak üzere yapılandırılan maksimum süre aşılmıştır. Varsa, Soğutma valfini ve filtre elemanını, soğuk su basıncını ve soğutma girişindeki vernier valfin pozisyonunu kontrol edin. Soğutma, sıcaklık istenen seviyeye ulaşana kadar devam edecek ve hata otomatik olarak ortadan kalkacaktır.

#### Explanation

The microprocessor is still receiving information that a level is made just before or during an extract step, or immediately before the fill for a bath step. This error is self-clearing when level is lost.

Time to fill to level exceeded 10 minutes. Check the water valves, strainers, supply lines, and water pressure. The machine will continue to fill until level is reached, at which time the error will automatically clear and normal operation will resume.

**E-P Plus models only.**The configured maximum time to steam up to the desired temperature has been exceeded. Check the steam valve, strainer, main steam header and pressure, etc. Steaming will continue until temperature is achieved, when the error will automatically clear and normal operation will resume.

**E-P Plus models only.**The configured maximum time to cool down to the desired temperature has been exceeded. Check the cooldown valve and strainer if equipped, cold water pressure, and position of vernier valve on cooldown inlet. Cooldown will continue until the desired temperature is achieved, when the error will automatically clear.



Göster veya uygula [Display or Action]	Açıklama	Explanation
DRENAJ SÜRESİ ÇOK UZUN  TOO LONG TO DRAIN	Drenaj tanımlanan sürede yeterli olmamaktadır. Ne zamanki tamburdaki su seviyesi yeterli seviyeye düşerse hata ortadan kalkacak ve program kaldığı yerden devam edecektir.	The machine did not drain properly in the allotted drain time. This self-correcting error will clear when the water level in the basket is low enough to begin the next operation.
PROBU KONTROL ET  CHECK PROBE	<b>Sadece E-P Plus modelleri.</b> Bu hata mesajı, sıcaklık probu rezistansının tanımlanan aralığın dışında olduğunu gösterir. Prob uçlarını işlemci kartından çıkarıp kontrol edin, doğru bir dijital ohmmetre ile rezistansı kontrol edin. İki uç arasındaki rezistans 2K ile 35K ohm arasında olmalıdır. Her bir uç ile topraklama arasındaki rezistans sonsuz olmalıdır.	<b>E-P Plus models only.</b> This error message indicates that the resistance of the temperature probe is outside the specified range. Test the probe by disconnecting the probe leads from the processor board and checking the resistance with an accurate digital ohmmeter. Resistance between the two leads must be between 2K and 35K Ohms. Resistance between each lead and ground must be infinite.
DIŞ HATALAR  EXTERNAL FAULT	Çoğu makinede, bu hata programlanan kimyasal enjeksiyonunun yapılamadığını ifade eder. Bu da genellikle kimyasal kaynağının boş olmasından kaynaklanır. Kimyasal doldurulduğunda enjeksiyon gerçekleşecek, hata otomatik olarak ortadan kalkacak ve program kaldığı yerden devam edecektir.  On 48040F7J/F7B bu model makinelerde, milyatağı hava basıncının düşük ve yetersiz olduğunu ve su mil yatağının kirlemesine karşı koyamadığını ifade eder.	On most machines, this error indicates that the programmed chemical injection failed, usually because the chemical supply system is empty. When chemicals are added and can be injected, this error clears automatically, allowing operation to resume.  On 48040F7J/F7B models, this error indicates that the bearing air pressure is below the minimum required to help protect the bearing from water contamination.

### Bölüm 3. Hataları Düzeltme

#### Göster veya uygula [Display or Action]

FREN BASILI . HATA
BRAKE PRESS . FAULT

#### Açıklama

Bu hata sadece silindir freni olan makinelerde ortaya çıkabilir. Bu mesaj frenin istenmeyen şekilde takıldığını ifade eder. Makine yeterli hava basıncı alamadığından kapalı freni açamamaktadır. Tesisin kompresör hava basıncını kontrol ediniz.

#### Explanation

This error appears only on machine models equipped with a cylinder brake. The message indicates that the brake is engaged when it should be disengaged. This is usually because the machine is not receiving sufficient air pressure to open the normally-closed brake. Check the plant compressed air supply.

THREE WIRE DISABLED
THREE WIRE DISABLED

Üç telli rölenin gücü kesilmiştir. Bu röle, kontrol devresinin elektriğini makineye iletmektedir. *Başlat* düğmesine ( ) kısaca basılarak güç verildiğinde, motordaki aşırı yüklemeler, otomatik kapı kilitleri, vb. ile birlikte olağan açık kontaklarından güç alır. Bu kontaklardan herhangi biri kısa süre için bile olsa açılırsa, makine durur ve bu ekran görünür. Bu hata sadece *Başlat* düğmesine ( ) basılarak giderilebilir; bu durumda hatanın giderilmiş olması gerekmektedir.

The three-wire relay de-energized. This relay provides control circuit power to the machine. Once energized by momentarily depressing the *Start* button ( ), it is held energized by its own normally open contacts, along with motor overloads, door interlocks, etc. Should any of these contacts open even momentarily, the machine stops and this display appears. This error can only be cleared by depressing the *Start* button ( ), and only then if the error has been cleared.

İNVERTÖR HATASI
INVERTER FAULT

Bu hata mikroprosesörde, formulanın başlatılması ile birlikte invertörden 14 saniye içinde iletişim olmamışsa belirir. 14 saniyede invertörden bilgi akışı olmamışsa, timer duracak, tambur sabit olarak beklemede olacak ve drenaj valfleri açılacaktır. Yenilemek için, *Sonraki* bu anahtara basınız (y).

This error message appears if the microprocessor does not receive an input from the inverter within 14 seconds of the beginning of the formula. After 14 seconds without an inverter input, the timer stops, the basket is stationary, and the drain valve opens. To recover, press the *Next* key (y).

**Göster veya uygula**  
[Display or Action]

TİTREŞİM SW DURDURMA  
YENİLEME DÜZENİ

VIBRATION SW TRIPPED  
RECOVERY SEQUENCE

**Açıklama**

Titreşim siviçi kapandığında , timer durur. 45 ile 85 saniye sonra, tambur su doldururken, basket ters dönüş yapar. Düşük su seviyesine ulaşıldığında, silindir yıkama hızında bir dakika daha ters dönüşünü sürdürür. Sonra sıkma hızına geçer.

**Explanation**

When the vibration switch closes, the timer stops. After 45 to 85 seconds (120 seconds on 42032F7J models), the basket reverses at wash speed as the cylinder fills with water. When low level is achieved, the cylinder reverses for one additional minute at wash speed, then accelerates to extract speed.

— Sonu BICJHT04 —

— End of BICJHT04 —