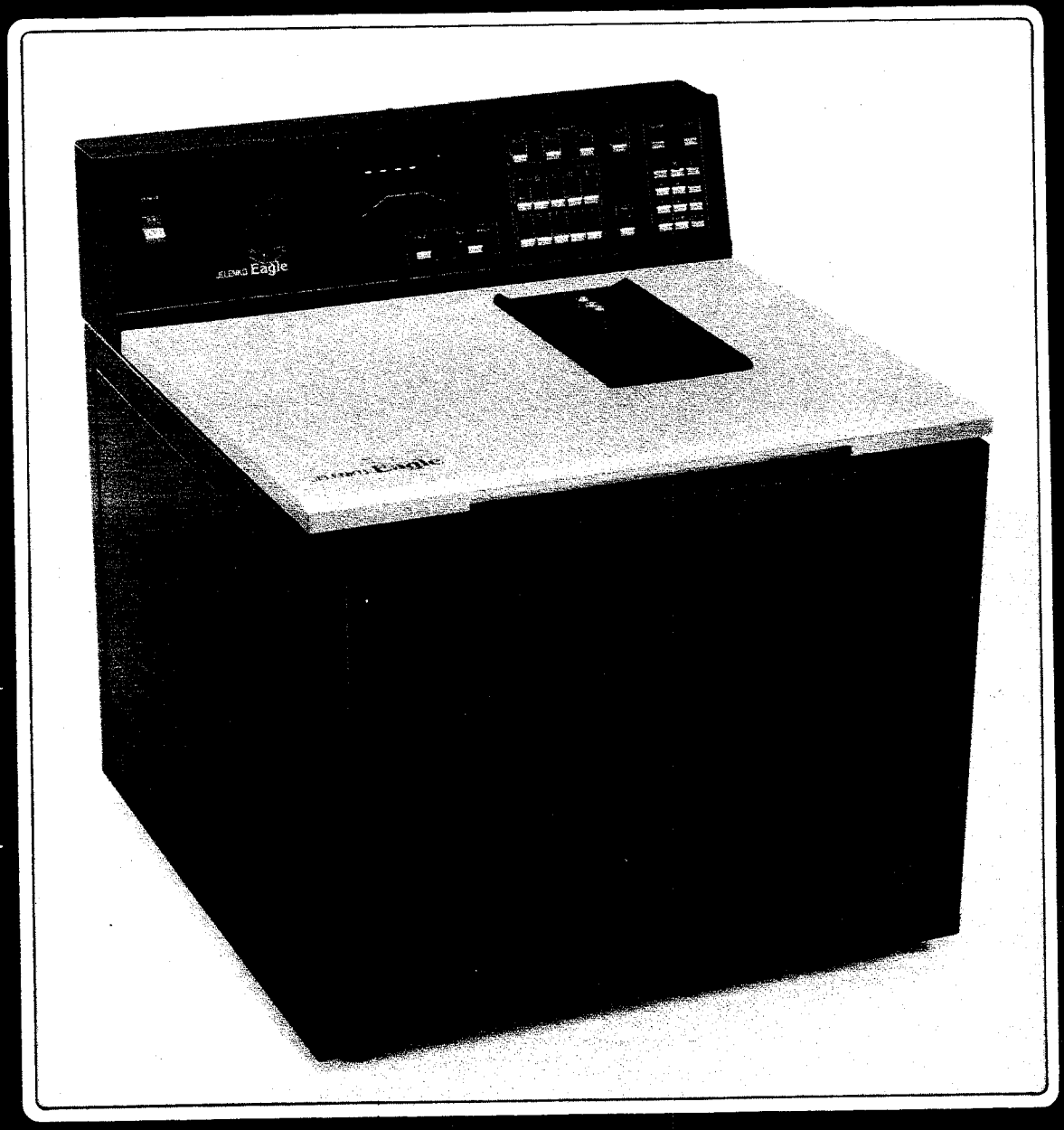

Eagle

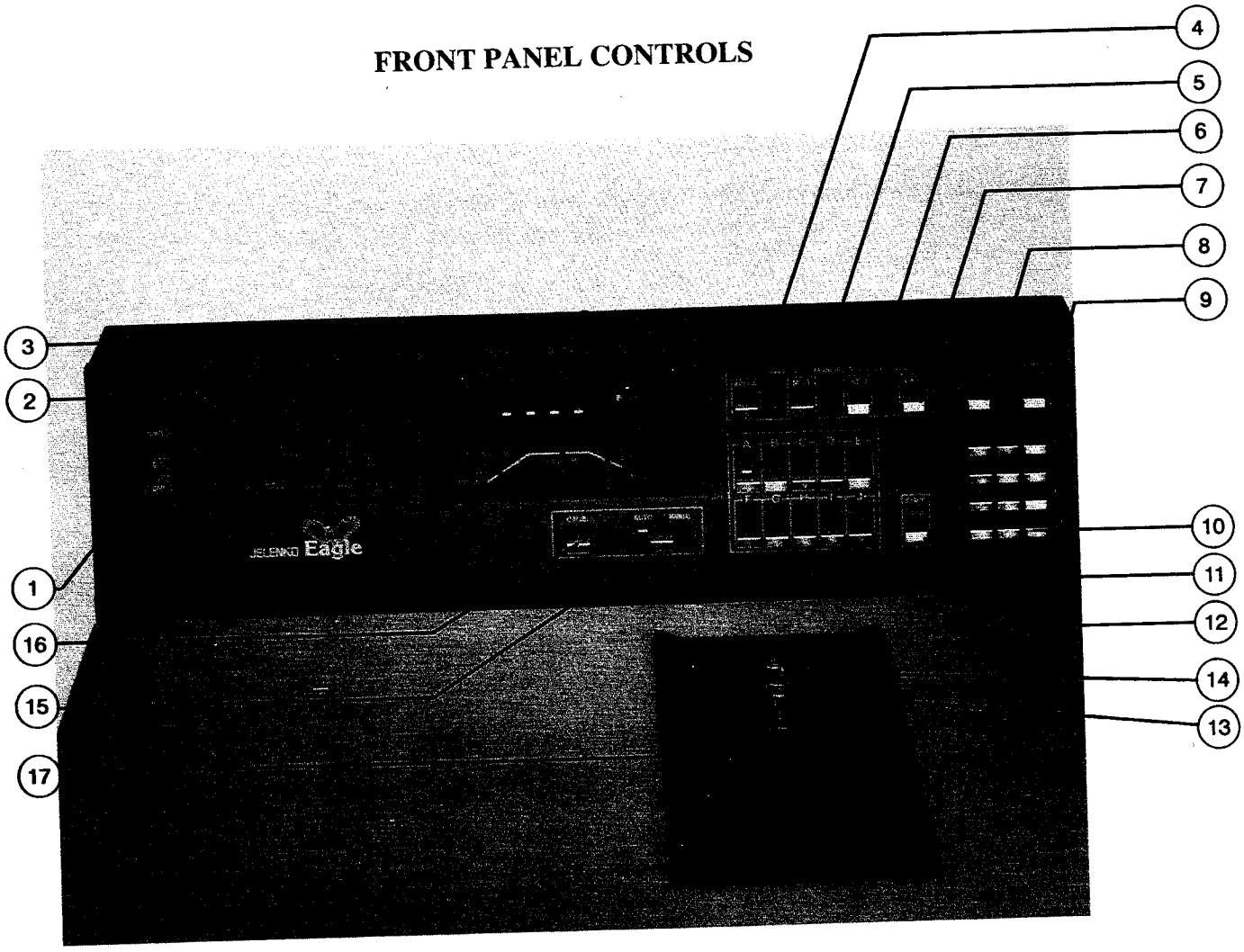
JELENKO EAGLE
INDUCTION CASTING MACHINE

SPECIFICATIONS

Maximum Crucible Capacity:	64 dwt (100 grams)
Ring Capacities:	1.25" through 3.75" * (31.8mm through 95.25mm) *Includes ringless Partial Denture casting method.
Overall Dimensions:	21.3" Wide x 22.3" Deep x 23.6" High (54.1 cm Wide x 56.6 cm Deep x 59.9 cm High)
Electrical:	230 Volts** 50/60 Hz 3.7 KVA **The Jelenko Eagle Induction Casting Machine will operate over a range of plus or minus 10 percent of the indicated rated line voltage.
Net Weight:	163.0 lbs (73.4 kg)
Finish:	Black and orange textured enamel over steel.
Number of Programs:	Ten - User Programmable Casting Cycles One - Automatic Calibration Program One - Manual Casting Mode
Supplied Accessories:	Four - Ceramic Crucibles One - Argon Gas Supply Hose One - Calibration Stand One - Ring Cradle 1.25" One - Ring Cradle 1.75" One - Ring Cradle 2.0" One - Ring Cradle 2.75" One - Ring Cradle 3.5" One - Ring Cradle 3.75"

Note: Use of the Jelenko Eagle Casting Machine with Argon Gas requires an Argon Gas Flow/Pressure Regulator Assembly (Jelenko PN 340015) -- Not supplied with the unit.

FRONT PANEL CONTROLS



1. POWER SWITCH
2. GRAPHIC DISPLAY
3. DIGITAL DISPLAY
4. ARGON KEY
5. MELT KEY
6. HOLD KEY
7. CAST KEY
8. PROGRAM KEY
9. STEP KEY
10. NUMERIC KEYBOARD
11. START/STOP KEY
12. PROGRAM SELECTOR KEYBOARD
13. OPTICAL DETECTOR LOCKING SCREW
14. OPTICAL DETECTOR ADJUSTMENT KNOB
15. AUTO/MANUAL SELECTOR KEY
16. CALIBRATE KEY
17. FILTERED VIEWING WINDOW

HOLD KEY (6): The third of four Manual Program Keys, this key is used to maintain a desired alloy temperature.

To utilize this function, this key would be depressed once the DIGITAL DISPLAY indicates the desired alloy temperature to be held. The casting machine will continue to maintain the temperature at which the key was depressed until either the MELT Key or CAST Key is depressed or the Hold Time exceeds 60 seconds, after which time the casting machine will automatically stop the alloy melting process.

A brief tone response will be heard and the Indicator Lamp above this key will illuminate when this key is selected. Note that this key may be activated only when the casting machine is in the Manual Mode.

CAST KEY (7): The fourth of four Manual Program Keys, this key is used to cast the alloy once it has been melted using the MELT and HOLD Keys.

Once the alloy has been determined to be molten it may be cast by depressing this key. Once this key is depressed, the Melting Coil will be lowered automatically and the Casting Arm will spin. The Casting Arm will continue to spin until the CAST Key is depressed a second time or the casting time exceeds 60 seconds, after which time the Casting Arm will automatically stop.

A brief tone response will be heard and the Indicator Lamp above this key will illuminate when this key is selected. Note that this key may be activated only when the casting machine is in the Manual Mode.

PROGRAM KEY (8): When this key is depressed, the casting machine is placed into the Program Mode and will accept casting cycle parameter changes entered through the NUMERIC KEYBOARD. This key must always be depressed when entering, changing or reviewing parameters in any of the programs.

A brief tone response will be heard and the Indicator Lamp above this key will illuminate when this key is selected.

STEP KEY (9): Used in conjunction with the PROGRAM Key during programming or when reviewing a program, to advance the GRAPHIC DISPLAY to the next parameter in a program.

Depressing the key once will cause the GRAPHIC DISPLAY to advance one parameter at a time; while holding the key depressed will cause the display to advance the parameters automatically, until the key is released. This feature allows the operator to check all of the parameters of a casting cycle program rapidly, or advance several parameters within a program, without having to depress the key many times.

Each time this key is depressed, a brief tone reponse will be heard. When advancing the parameters automatically, a brief tone response will be heard with each parameter advancement.

FRONT PANEL CONTROLS

When the casting machine is first turned on, the Auto Mode Indicator Lamp will be illuminated. Depressing the AUTO/MANUAL Key once will cause the Manual Mode Indicator Lamp to illuminate again. The desired mode of operation for the casting machine may be selected in this manner.

Each time this key is depressed, a brief tone response will be heard.

CALIBRATE KEY (16): Used during the calibration procedure for the casting machine to select the Automatic Self-Adjusting Calibration Program.

Each time this key is depressed, a brief tone response will be heard and the Indicator Lamp above the key will illuminate to indicate that the Automatic Calibration Program has been selected.

FILTERED VIEWING WINDOW (17): Constructed using a specially filtered glass, this window glass permits safe viewing of the alloy during melting. Note that the window has been designed to slide out of position so that the alloy may be viewed easily during initial heating.

CASTING COMPARTMENT

ARM CLAMPING KNOB (18): This knob is loosened by rotating counterclockwise, as required when balancing the Casting Arm. Once the Casting Arm has been balanced, the knob is tightened to secure the Casting Arm by rotating clockwise.

ARM COUNTERWEIGHT (19): This counterweight is used for balancing the Casting Arm. To move the counterweight, push in the release button and then slide the counterweight in either direction to balance the arm.

LOCKING PLATE KNOB (20): Used to move the Locking Plate in or out when loading casting rings on the casting arm assembly. When the Locking Plate is in the forward position (away from the crucible), the casting ring is secured against the back-up plate and is ready to be cast.

DO NOT CAST WITH THE LOCKING PLATE IN THE RETRACTED POSITION.

COIL UP/DOWN SWITCH (21): Used to raise or lower the Melting Coil Assembly when preparing the casting machine for melting and casting or balancing the casting arm.

MELTING COIL ASSEMBLY (22): When raised, the Melting Coil Assembly surrounds the Crucible and produces the energy necessary to melt the alloy within the crucible.

The Melting Coil Assembly is raised and lowered by means of the COIL UP/ DOWN SWITCH.

CRUCIBLE CRADLE (23): The CRUCIBLE CRADLE supports the Crucible during alloy melting and casting.

This cradle slides within the casting arm assembly and allows the crucible to move from the melt position to the casting position.

LOCKING PLATE (24): Used to secure the casting ring in position against the back-up plate.

RING CRADLE (25): One of six ring cradles supplied with the unit, this cradle is placed between the two casting arm rods to support the casting ring.

ARM BACK-UP PLATE (26): This is a stationary plate which acts as a stop for the casting ring when the locking plate is released to hold the casting ring in place.

ARGON GAS NOZZLE (27): Supplies Argon Gas to the Crucible to help prevent oxidation of the alloy during melting.

To use Argon Gas during the melting process, the Argon Gas Nozzle should be rotated clockwise until the nozzle drops into position over the Crucible.

When Argon Gas is not being used, the Argon Gas Nozzle should be rotated counterclockwise until it locks into position away from the Crucible.

SIDE CONTROLS

TONE POTENTIOMETER (28):

Using a small screwdriver, the volume of the tones produced by the casting machine may be increased or decreased with this control.

°F/ °C SELECTOR SWITCH (29):

Used to select either degrees Fahrenheit or degrees Celsius as the unit of measurement for the casting machine temperature display. When the selector switch is moved upward, the display will indicate temperature in degrees Fahrenheit; where as moving the switch downward will result in readings in degree's Celsius.

The position of this switch may be changed at any time and will cause the programmed temperature, as well as the display of the actual alloy temperature, to change to the selected unit of measurement.

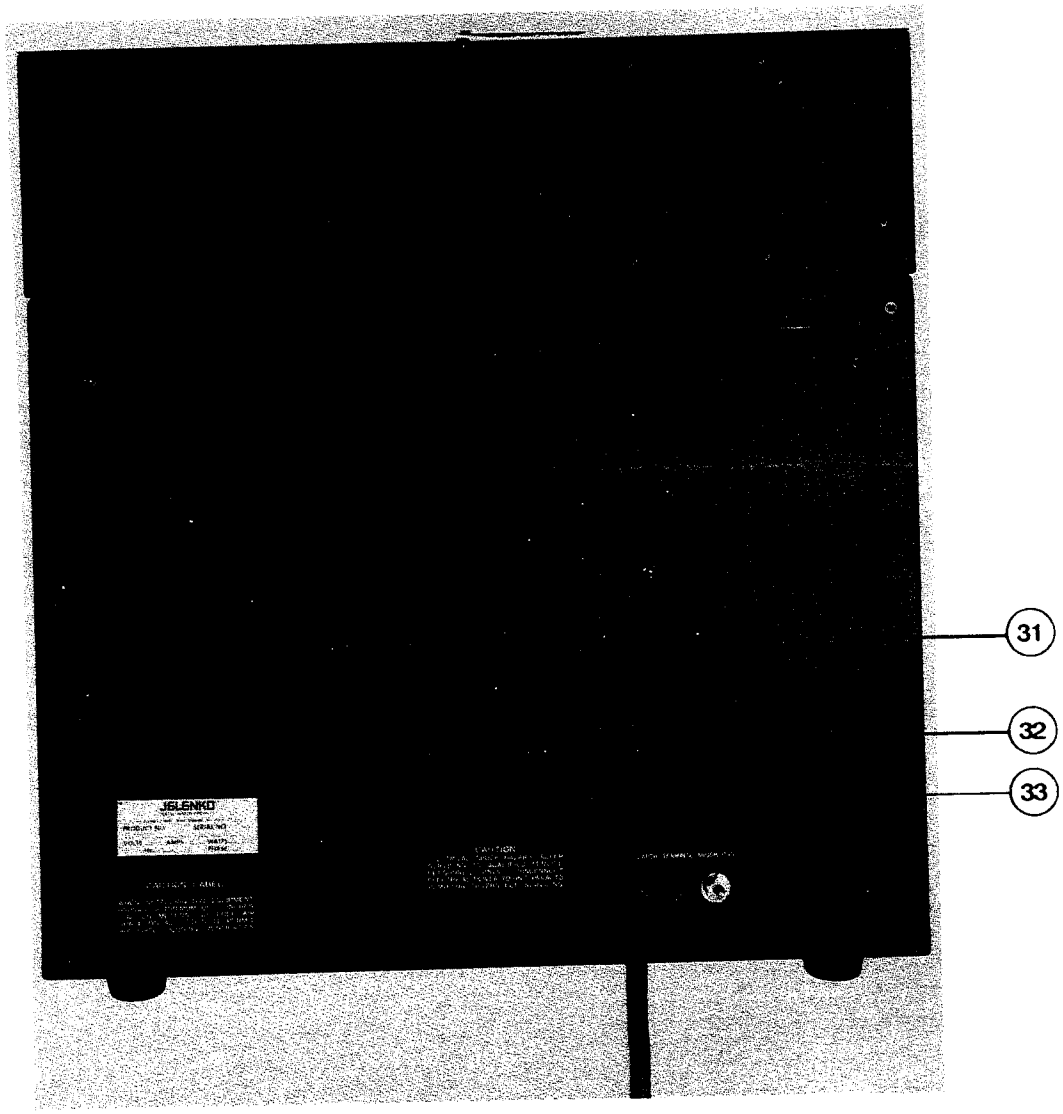
The °F/°C SELECTOR SWITCH is concealed by an Access Cover when not in use. This cover should always be replaced after using this switch.

CASTING COMPARTMENT CLEAN-OUT DOOR (30):

A sliding door which facilitates cleaning of debris from the Casting Compartment that may result from everyday use.

It is recommended that the Casting Compartment be inspected and cleaned thoroughly, if necessary, daily, as part of normal maintenance.

REAR VIEW



31. POWER LINE CORD
32. ELECTRICAL GROUND BINDING POST
33. ARGON GAS CONNECTOR

CALIBRATION

Your Jelenko Eagle Induction Casting Machine has been facotry tested and calibrated. However, it is recommended that the unit be calibrated upon initial installation and once each month as part of normal maintenance.

The Eagle features an Automatic, Self-Adjusting System which performs the calibration process electronically, eliminating the need for operator adjustments.

The procedure outlined in this section utilizes Jelenko Olympia Alloy as a temperature reference. Two new 2 dwt ingots are required for this procedure.

1. Insert two new 2 dwt ingots of Jelenko Olympia® Alloy into the supplied Calibration Stand as shown in photograph 1 in this section. Be sure that the ingots are visible through the hole in the Calibration Stand.

2. Place the Calibration Stand into a clean Ceramic (Non Carbon-lined) Crucible. Be sure the hole is in line with the crucible as shown in photograph 3 of this section.

3. Open the Casting Compartment Door and place the Crucible into the Crucible Cradle of the Casting Arm.

4. Rotate the Casting Arm Assembly and slide the Crucible Cradle inward so that the Crucible is positioned directly above the Melting Coil Assembly and raise the Melting Coil Assembly.

5. Close the Casting Compartment Door.

6. Loosen the Optical Detector Locking Screw and pivot the Optical Detector to the side so the beam of light is aimed directly into the hole on the calibration stand and is shining on the Olympia ingots.

7. Tighten the Optical Detector Locking Screw to secure the Optical Detector in this position. Check the beam of light to ensure it was not moved while tightening the Optical Detector Locking Screw.

8. Depress the CALIBRATE Key. The Indicator Lamp above the key will illuminate to indicate that the Calibration Program has been selected.

9. Depress the START/STOP Key. The Indicator Lamp above the key will illuminate, indicating that the Calibration Program is in operation.

10. Once the temperature of the Calibration Ingot reaches 1600°F (871°C), the DIGITAL DISPLAY will begin to display the actual ingot temperature.

11. When the Calibration Ingots begin to melt, the Optical Detection System will sense this and automatically adust the DIGITAL DISPLAY, to indicate 2350°F or (1290°C), a tone response will be heard and the casting machine will automatically return to the Stop Mode.

12. The Calibration procedure is now completed and the crucible may be removed.

DESCRIPTION OF CASTING CYCLE PARAMETERS

ARGON GAS

Determines whether Argon Gas will flow through the Argon Gas Nozzle into the Crucible during a casting cycle. In the Automatic Mode of operation, the casting machine control system will automatically start the flow of Argon at the beginning of the casting cycle and stop the flow at the time the Casting Arm begins to spin.

Argon Gas may be programmed to be either "on" or "off" during a casting cycle.

CASTING TEMPERATURE

The Temperature at which the casting machine completely melts the alloy and if programmed, maintains (or holds) prior to casting the alloy.

Any Casting Temperature between 1600°F (871°C) and 3000°F (1650°C) may be programmed into the casting machine.

HOLD TIME

The length of time over which the casting machine will maintain the programmed Casting Temperature prior to the automatic lowering of the Melting Coil Assembly and spinning of the Casting Arm.

Any Hold Time between 0 seconds and 60 seconds may be programmed into the casting machine.

TORQUE

The amount of initial thrust which will be applied to the Casting Arm once the Melting Coil Assembly has been lowered and the Casting Arm begins to spin.

For small casting ring sizes or alloys with low densities, a high torque value should be programmed; whereas larger casting rings or alloys with high densities will require lower torque settings.

The torque value may be programmed in three steps, from minimum to maximum, by programming a value of 1, 2, or 3.

CASTING TIME

The length of time the Casting Arm will spin before the "Dynamic Braking System" of the casting machine brings the arm to stop.

Once the Casting Time has elapsed and the Casting Arm is brought to a stop, the COMPLETE Indicator Lamp on the Front Panel of the casting machine will illuminate and a tone will sound.

Any Casting Time from 10 seconds through 1 minute and 30 seconds may be programmed into the casting machine.

CRUCIBLE TYPE

Allows the operator to specify which type of crucible is to be used in the machine.

For ceramic crucibles, "nCbn" (Non-Carbon) should be selected.

For carbon lined crucibles, "Cbn" (Carbon) should be selected.

This will allow the machine to more accurately control the temperature of the alloy.

5. Depress the following numbers on the NUMERIC KEYBOARD:

1 - To turn "on" the Argon Gas for this casting cycle.

If, while making these entries, an incorrect key is depressed, the display may be cleared by depressing the CLEAR Key.

Once the word "on " appears correctly on the DIGITAL DISPLAY, depress the ENTER Key. This parameter will be entered, the display will automatically advance to the next parameter and the CASTING TEMP Indicator Lamp on the GRAPHIC DISPLAY will illuminate.

The Casting Temperature presently programmed into the casting machine will appear on the DIGITAL DISPLAY.

6. Depress the following numbers on the NUMERIC KEYBOARD:

2 4 5 0 - To correspond to the desired Casting Temperature.

7. Note that the TEMP Indicator Lamp to the right of the DIGITAL DISPLAY will flash on and off to indicate that a temperature parameter is being programmed.

Once the desired Casting Temperature appears correctly on the display, depress the ENTER Key.

This parameter will be entered, the display will automatically advance to the next parameter, the HOLD TIME Indicator Lamp on the GRAPHIC DISPLAY will illuminate and the Hold Time presently programmed into the casting machine will appear on the DIGITAL DISPLAY.

8. Depress the following keys on the NUMERIC KEYBOARD:

1 5 - To correspond to the desired number of seconds for maintaining the Casting Temperature.

Note that the TIME Indicator Lamp to the right of the DIGITAL DISPLAY will flash on and off to indicate that a time parameter is being programmed.

Once the desired Hold Time appears correctly on the display, depress the ENTER Key. This parameter will be entered, the display will automatically advance to the next parameter. The TORQUE Indicator Lamp on the GRAPHIC DISPLAY will illuminate and the Torque value presently programmed into the casting machine will appear on the DIGITAL DISPLAY.

9. Depress the following number on the NUMERIC KEYBOARD:

2 - To correspond to the desired Torque value.

Once the desired Torque value appears correctly on the display, depress the ENTER Key. This parameter will be entered, the display will automatically advance to the next parameter. The CASTING TIME Indicator Lamp on the GRAPHIC DISPLAY will illuminate and the Casting Time presently programmed into the casting machine will appear on the DIGITAL DISPLAY.

THE USE OF ARGON GAS

The Jelenko Eagle Induction Casting Machine has been designed with the capability of providing an Argon Gas atmosphere for the alloy during the melting process to reduce alloy oxidation.

The procedure for adjusting the Argon Gas system is described below.

1. Make certain that the Eagle Induction Casting Machine has been installed and set up as outlined under "INSTALLATION" , "CALIBRATION" and "THE OPTICAL DETECTOR" on pages 4, 16, 17 and 18 of this manual.

2. Press the POWER SWITCH to the "on" position. The Indicator Lamp above the PROGRAM SELECTOR KEY "A", the AUTO Mode and Temp Indicator Lamps will illuminate, four bars will appear on the DIGITAL DISPLAY and the cooling fans will be heard.

3. Depress the AUTO/MANUAL SELECTOR Key once to select the Manual Mode of operation. The Manual Indicator Lamp above the key will illuminate.

4. Depress the ARGON Key. The Indicator Lamp above the key will illuminate, indicating that the Argon Gas option has been selected.

5. Open the valve on the tank of compressed (bottled) Argon Gas and adjust the Flowmeter/Regulator for a gas flow rate of approximately 4 cu ft/hour (1.9 liters/minute.)

6. Depress the ARGON Key. The Indicator Lamp above the key will turn off and the flow of Argon Gas will stop. The Pressure Gauge of the Flowmeter/Regulator should rise to approximately 3 lbs/sq in (0.2 kg/sq cm.)

7. The setting of the Argon Gas will be controlled by the casting machine, as selected by the operator. It is recommended that the valve on the compressed (bottled) Argon Gas tank be closed at the end of each work day to minimize the possibility of gas loss.

THE CASTING PROCEDURE FOR THE AUTOMATIC OPERATING MODE

The procedures outlined in this section are recommended for making successful castings with your Eagle Induction Casting Machine.

1. Press the POWER SWITCH to the "on" position.

2. Make certain that the Optical Detector has been properly aligned as outlined under "THE OPTICAL DETECTOR" on page 16 of this manual and that the calibration procedure as outlined under "CALIBRATION" on pages 17 and 18 has been performed.

3. Adjust the Arm Counterweight to the position which will provide a balanced condition for the casting ring size being used as determined when following the procedures under "BALANCING THE CASTING ARM" on page 24 of this manual.

4. Select the casting cycle program which has been programmed for the alloy being cast as outlined under "PROGRAMMING PROGRAMS "A" THROUGH "J" on pages 20 through 22 of this manual.

5. Place a Crucible of the type to be used (Ceramic or Carbon-lined) in the Crucible Cradle of the Casting Arm.

6. Place a ring cradle for the desired size securely onto the Casting Arm between the two guide rods.

7. Rotate the Casting Arm so that the Crucible is positioned directly above the Melting Coil Assembly and raise the Melting Coil Assembly completely.

8 Place the alloy to be cast into the Crucible, making certain that the alloy is as far down into the Crucible as is possible.

9. If Argon Gas is to be used during the alloy melting process, rotate the Argon Gas Nozzle clockwise until the Nozzle drops into position over the Crucible.

10. Place the casting ring into the ring cradle and using the Locking Plate Knob, release the Locking Plate, so that the ring cradle is held securely between the Back-Up Plate and the Locking Plate.

11. Close the Casting Compartment Door.

12. Depress the START/STOP Key to begin the programmed Casting Cycle.
Once the START/STOP Key has been depressed to begin the programmed Casting Cycle, the Indicator Lamp above the key will illuminate to indicate that the casting cycle has been started.

When the alloy temperature reaches 1600°F (871°C), the DIGITAL DISPLAY will indicate the actual alloy temperature. In addition, the Indicator Lamp of the GRAPHIC DISPLAY will show the status of the casting machine in the programmed Casting Cycle.

After the programmed Hold Time has elapsed, the Melting Coil Assembly will be lowered automatically and the Casting Arm will spin for the Casting Time programmed.

At the completion of the programmed Casting Cycle, the Casting Arm Assembly will stop, the COMPLETE Indicator Lamp of the GRAPHIC DISPLAY will illuminate and a brief tone response will be heard.

The Casting Cycle is completed and the casting ring may be removed from the Casting Arm.

MANUAL MODE OPERATION

Operation of the Eagle Induction Casting Machine in the Manual Mode is performed as outlined in this section.

1. Press the POWER SWITCH to the "on" position. The Indicator Lamp above PROGRAM SELECTOR KEY "A", the AUTO Mode and TEMP Indicator Lamps will illuminate, four bars will appear on the DITGITAL DISPLAY and the cooling fans will be heard.

2. Make certain that the Optical Detector has been properly aligned as outlined under "THE OPTICAL DETECTOR" on page 16 of this manual and that the calibration procedure as outlined under "CALIBRATION" on pages 17 and 18 has been performed.

3. Depress the AUTO/MANUAL MODE SELECTOR Key once. The MANUAL MODE Indicator Lamp will illuminate to indicate that the Manual Mode of operation has been selected.

4. Adjust the Arm Counterweight to the position which will provide a balanced condition for the casting ring size being used as determined when following the procedures under "BALANCING THE CASTING ARM" on page 24 of this manual.

5. Place a Crucible of the type to be used (Ceramic or Carbon-lined) in the Crucible Cradle of the Casting Arm Assembly.

6. Rotate the Casting Arm Assembly so that the Crucible is positioned directly above the Melting Coil Assembly and using the COIL UP/DOWN SWITCH, raise the Melting Coil Assembly completely.

7. Place the alloy to be cast into the Crucible, making certain that the alloy is as far down into the Crucible as is possible.

8. If Argon Gas is to be used during the alloy melting process, rotate the Argon Gas Nozzle clockwise until the Nozzle drops into position over the Crucible.

9. Place the casting ring into the ring cradle and using the Locking Plate Knob, release the Locking Plate, so that the ring cradle is held securely between the back-up plate and the locking plate.

10. Close the Casting Compartment Door.

11. Depress the MELT Key to begin the alloy melting process. Once the alloy temperature reaches 1600°F (871 °C), the DIGITAL DISPLAY will begin to indicate the actual alloy temperature.

12. When the desired alloy casting temperature is obtained, as determined by the DIGITAL DISPLAY or observation by the operator, the HOLD Key may be depressed to maintain the casting temperature.

    Note that the alloy should be maintained at the casting temperature only long enough to obtain complete melting, and then should be cast.

13. Depress the CAST Key to cast the alloy. Once the desired casting time has elapsed, the CAST Key should be depressed a second time to stop the Casting Arm Assembly.

14. The Casting Cycle is completed and the casting ring may be removed from the Casting Arm Assembly.

UPPER AND LOWER LIMITS FOR THE SIX CASTING CYCLE PARAMETERS

PARAMETER	LOWER LIMIT	UPPER LIMIT
Argon	"off"	"on"
Casting Temperature	1600°F (870°C)	3000°F (1650°C)
Hold Time	0 Seconds	1 Minute 0 Seconds
Torque*	"1"	"3"
Casting Time	10 Seconds	1 Minute 30 Seconds
Crucible Type	"Cbn"	"nCbn"

*Torque may be programmed for a minimum value of "1", medium value of "2" or maximum value of "3".

ERROR CODES AND THE SELF -DIAGNOSTIC SYSTEM

The Jelenko Eagle Induction Casting Machine has been designed to provide the operator with Error Codes which provide valuable information related to programming or operating error or casting machine malfunctions.

The Error Codes which may be provided by the casting machine, their causes, and the corrective action required by the operator are outlined in this section.

1. "door"
   Cause

   During alloy melting or while the Casting Arm is spinning, the Casting Compartment Door is opened.

   Action Required by the Operator

   Close the Casting Compartment Door and depress the CLEAR Key to silence the alarm tone. Restart the melting or casting process if desired.

   Check the alignment of the door plunger and locking solenoid.

2. "Err 2"
   Cause

   Operator attempts to enter a parameter with a value which is not within the limits for that parameter.

   Action Required by the Operator

   Operator must select a value for the parameter which is within the limits for the parameter, as outlined on page 29 of this manual.

3. "AL-1"
   Cause

   During alloy melting, the temperature of the alloy exceeds 3050°F (1675 °C).

   Action Required by the Operator

   a. The Calibration Procedure, as outlined on pages 17 and 18, of this manual should be performed.
   b. If this problem occurs repeatedly, the parts listed below may be defective and should be replaced in the order indicated.
      1. S.C.R. Moducle
      2. Opto-Isolator, P.C. Board
      3. Control Circuit Board

8. "AL-6"

Cause

The casting machine power line amperage exceeds 20 amperes.

Action Required by the Operator

If this problem occurs repeatedly, the parts listed below may be defective and should be replaced in the order indicated.

1. S.C.R. Module
2. Opto-Insolator P. C. Board
3. Control Circuit Board

9. "AL-7"

Cause

During the casting machine Calibration procedure, the melting of the calibration ingot occurs before 2170°F (1190°C) or after 2530°F (1390°C).

Action Required by the Operator

a. Make certain that only Jelenko Olympia 2 dwt ingots are being used.
b. Using an empty crucible, verify that the Optical Detector is aligned properly as outlined on page 16 of this manual.
c. Repeat the Calibration procedure as outlined on pages 17 and 18 of this manual.
d. Reset the Calibration by depressing the CALIBRATE Key followed by the ENTER Key.

10. "AL-8"

Cause

During the Hold Time portion of a casting cycle, the casting machine compares the programmed Casting Temperature to the actual value. This alarm will occur if there is excessive variation between the two values.

Action Required by the Operator

If this problem occurs repeatedly, the parts listed below may be defective and should be replaced in the order indicated.

1. S.C.R. Module
2. Opto-Insolator P. C. Board
3. Control Circuit Board

11. "AL-9"

Cause

Once the START/STOP Key is depressed to begin a casting cycle program, the casting machine checks the actual temperature of the alloy compared to the programmed Casting Temperature. This alarm occurs if no temperature increase is detected after a predetermined time period

Action Required by the Operator

a. Using an empty crucible, verify that the Optical Detector is aligned properly as outlined on page 16 of this manual.
b. Confirm that the alloy is heating by observation through the Filtered Viewing Window and verify proper current (10-17 amperes) by depressing STEP Key during the melting cycle.
c. The parts listed below may be defective and should be replaced in the order indicated.
    1. H.F. Circuit Board and Fuse
    2. S.C.R. Module
    3. Opto-Isolator P.C. Board

EAGLE RENEWAL PARTS LIST

PRODUCT NUMBER	DESCRIPTION
340005	Eagle Floor Stand Riser
340010	Eagle Floor Stand
340015	Argon Gas Flow/Pressure Regulator
311115	Microprocessor Pwr Supply Ckt Bd
400844	Argon Gas Supply Hose
340020	Power Switch Hose
340021	Control Circuit Board
340022	Optical Detector Circuit Board
340023	Front Circuit Board
340024	Chassis Relay
340025	Line Current Transformer
340026	Primary Noise Filter
340027	Opto-Isolator Circuit Board
340028	S.C.R. Module
340029	Secondary Noise Filter
340030	Power Transformer
340031	Main Cooling Fan
340032	Main Cooling Fan Capacitor
340033	Casting Motor Capacitor
340034	Argon Gas Valve
340035	Casting Arm Drive Motor
340036	D.C. Current Reactor
340037	PLL Power Supply Circuit Board
340038	Driver Circuit Board
340039	PLL Circuit Board
340040	H.F. Circuit Board
340041	H.F. Current Transformer
340042	H.F. Matching Transformer
340043	Filter Capacitor
340044	Semiconductor Fuse
340045	H.F. Capacitor
340046	H.F. Circuit Board Cooling Fan
340047	Optical Detector Assembly
340048	Coil Up/ Down Switch
340049	Door Microswitch
340050	Melting Coil Lift Motor
340051	Melting Coil Limit Switch
340052	Melting Coil Assembly
340053	Melting Coil Ribbon Cable
340054	Crucible Cradle
340055	Calibration Stand
340056	Arm Back-Up Plate
340057	Argon Gas Nozzle Hose
340058	Counterweight
340060	Arm Clamping Knob
340061	Filtered Viewing Window
340062	Relay Circuit Board
340063	3300 MFD Capacitor
340065	Ring Cradle 1.25"
340066	Ring Cradle 1.75"
340067	Ring Cradle 2.00"
340068	Ring Cradle 2.75"
340069	Ring Cradle 3.5"
340070	Ring Cradle 3.75"
340071	Ring Cradle Oval
340072	Ringless Cradle 1.25"
340073	Ringless Cradle 1.5"
340074	Ringless Cradle 2.0"
340075	Ringless Cradle 2.5"
340076	Ringless Cradle Oval