HOWARD MILLER® **HEKMAN®**

Customer Service Troubleshooting Guide:

- **Mention: Advise the user not to function their base until the base has been initialized!**

Each base must be initialized prior to use:

(Initialization sets the legs to be even and will move the base to its lowest position.)
- o **Note: Installer must assure that all cables are free to move adequately in order to assure full up/down motion of the table without binding, tightness, or pulling.**

Troubleshooting steps:

1. **INITIALIZE**
   a. **Start out by asking the user to initialize the table base. Wait while the user initializes the base.**
      i. **To initialize the base:**
         1. Check all cords to assure they are fully connected
         2. Press and hold both the down and up buttons simultaneously until the legs start to move. The legs will begin to move down at half-speed of normal operation.
         3. Continue pressing the down and up buttons. The legs will move down to the lowest position and will 'rebound' slightly. The rebound indicates that the base is initialized.
         4. Release the down & up buttons. Initialization is complete.
   b. **Ask the user to cycle the table base 3 times to assure it is functioning well. The table may now be used.**
   c. If the initialization successfully reset the base, confirm with the customer that base must be reinitialized if power is disconnected.   The handset should read the lowest height programmed at the initialized state. Then complete the call.

2. **ERROR CODES** (If initializing the base does not work, please ask the caller which if any error code is displayed on the handset)
   a. Check all cords to assure they are fully connected and free of tangle.
   o **E01:** If error code E01, this indicates a leg error or column malfunction. Ask the user to disconnect and reconnect the leg cables, assuring that the end connectors are fully seated and secured with the built-in connector clip.
      - If a cable doesn't fully seat or is damaged, determine if the cable connector is damaged or the leg receptacle is damaged. Replace the damaged part and note the issue in the case. In the case, note the defective item and supplier. In the narrative, note the troubleshooting efforts and the replacement part/s to be sent.
      - Reinitialize the table base per 1.a-b
   o **E03:** If error code E03, this indicates the weight on the base is heavier than recommended. Ask the caller to remove weight from the table. Verify that the table is level and appears normal. Reinitialize the table per 1.a if needed. Then resume normal function.
   o **E04:** If error code E04, this indicates a data error. Ask the caller to perform the same functions as E01.
   o **E05:** If error code E05**,** this indicates a button is stuck. Ask the caller to check the function of the buttons in the handset. If a button is stuck, press the button several times to loosen/reseat the button. If the button does not become free, replace the handset. In the case, note the defective item and supplier. In the narrative, note the troubleshooting efforts and the replacement part/s to be sent.
   o **E06:** If error code E06, this indicates an interruption of communication between the control box and handset. You should ask the user to remove and reinstall the handset cable in the Control Unit, assuring that the end connector is fully seated and secured with the built-in connector clip. If the connector will not fully seat and clip into the Control Unit, determine if the handset connector is damaged or if the Control Unit connector is damaged. Replace damaged item. If an extra handset is available, replace the handset and check for function. If the table functions normally with the new handset, replace the handset.

- o **E07**: If error code E07, this indicate the height of the table was incorrectly set. The handset needs to have the height readout reset.

  To reset the height readout,
  1. Press the S button and the up button simultaneously for approximately 3 seconds. The first digit will begin to blink.
  2. Press the up or down button to change the number to the desired height.
  3. Press the S button. The next digit will begin to blink.
  4. Repeat steps 2 and 3 to change the 2nd digit.
  5. Press the S button and the 3rd digit will begin to blink.
  6. Repeat steps 2 and 3 to change the 3rd digit.

  The height programming is now complete.
- o **E08:** If error code E08, this indicates a damaged motor cable (leg cable). You should ask the user to confirm if any visible damage is done to the motor cable. If not, have them wait 5 minutes and then run through the initialization process. If there is damage to the motor cable, then it will need to be replaced with a new leg. In the narrative, note the troubleshooting efforts and the replacement part/s to be sent.
- o **E09:** If error code E09, this indicates a Hall Signal Interference. If this occurs, you should ask the user to attempt Initializing the base and remove any interference above or below the surface which could interfere. If the initialization work, then it is solved. If the base will not initialize you are to send out a replacement leg, note the troubleshooting efforts and the replacement part/s to be sent.
- o **E10:** If error code E10, this indicates a malfunction inside the control box. You are to ask the user to unplug the base from the main power source and let it rest for a minimum of 1-2 minutes. Then the user can plug the power back into the power source and attempt to initialize the base. This should fix it. If it does not; you are to send out a replacement control box, note the troubleshooting efforts and the replacement part/s to be sent.
- o **E11:** If error code E11, this indicates a Power Adapter issue inside the control box. If this occurs, you are to ask the user to unplug the power to the base for a minimum of 5 minutes. The user can then plug the power cord back in providing power to the base. If the base now works as expected, have the user initialize the base. If the base is still showing an E11 error code after plugging the power cord back in, the control box will need to be replaced as the power adapter inside the control box is faulty.
- o **E12:** If error code E12, this indicates a Gryo Sensor Malfunction. First ask the user to confirm the control box is tightly secured to the bottom side of the tabletop. Once they confirm it is; You are to ask the user to unplug the base from the main power source and let it rest for a minimum of 1 minute. Then the user can plug the power back into the power source and attempt to initialize the base. This should fix it. If it does not; you are to send out a replacement control box, note the troubleshooting efforts and the replacement part/s to be sent.

ERROR CODES

Error Code	Description	Possible Causes	Trouble-Shooting Measures
E01	Column malfunction	- Columns and control box are disconnected	1. Check if connection between columns and control box are loose. If Yes, please re-connect it securely. 2. Check if cable connector or column receptacle is damaged. If Yes, please replace it.
E03	Overload	- Tabletop plus weight above table is over rated load of control box.	1. Remove load (weight) from surface
E04	Data Exception	- Control box working under severe environment; - Initialization interrupted;	1. Initialize the table base.
E05	Key stuck	- Key got stuck, then digital read out kept same for 30 sec., E05 showed up.	1. Press the key several times to get it free; 2. Replace the handset.
E06	Communication Interrupted	- Commnunication between handset and control box is interrupted and handset can not receive datas for 5s	1. Please re-plug the handset securely into the control box and see if that works. 2. Please check if the receptacle in control box is good, If NOT, please replace control box. 3. If E06 still shows up, please consider to replace handset and/or control box.
E07	Handset Height Set Value too small	- Height setting of handset smaller than min. height of the column	1. Height setting of handset must be bigger than allowed min. height of the column.
E08	Motor Short Circuit	- Motor cable damaged; - Motor damaged;	1. Check if the motor cable is damaged. If YES, replace it. 2. Power on and initialize the table base. 3. If E08 still shows up, replace the motor or the column.
E09	Hall signal abnormal	- Hall signal counting abnormal	1. Initialize the table base. 2. If E09 still shows up, replace the motor or the column.
E10	Drive Abnormal	- Malfunction occures inside control box	1. Cut off power source and cool down control box for at least 1 min., then initialize the table base. If malfunction still occurs, replace the control box.
E11	Power Adapater Failure	- Malfunction occures inside control box	1. Cut off power source and cool down control box for at least 5 min., then initialize the table base. If malfunction still occurs, replace the control box.
E12	Gyro sensor malfunction	- The gyro sensor is malfunctional; - Inclined table top;	1. Power off and then power on. Then initialize the table base. 2. Level the table top or place the control box on a horizontal surface

➢ **If, after troubleshooting error codes E01-E03, the base is still not functioning, replace the Handset.**
➢ **If, after troubleshooting error codes E04-E07, the base is still not functioning, replace the Control Unit.**

3. If the table is not functioning and there is no error code, and the handset has power.

    a. Check to see if the surface is level. Confirm that all legs are perpendicular, and that one leg is not at an angle after final placement of the table base. If the leg is bent (not straight) it may send a false signal to the Control Unit and not function properly.

    b. Check to see if there is too much weight on the top of the table and remove excess weight

    c. Check all cords to assure they are fully connected

    d. Check to assure that there is no interference of the table with garbage cans, other tops, boxes or other items that can interfere with table movement.

Once steps 'a' through 'd' have been taken, **reinitialize** the table base.

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Additional items to check:

Symptom	Check	Action	Complete?
The base does not run and there does not seem to be power to the handset	Is the main power cord connected to the control box?	• Assure all cables are firmly inserted into the control box, verifying that it is straight and fully seated. • Verify the plug is fully inserted into the wall socket and that the socket has power • If another handset is available to you, connect it to the base if the table runs the nonresponsive handset is defective. If table remains unresponsive, connect another control box and initialize the base if functionality is restored then the nonresponsive control box is defective. Damaged parts can be replaced by contacting Customer Service at (###) ###-####	
	Are all plugs mounted and inserted properly in the control box and in the leg receptacles?	• Remove and reinsert all connecting cables into each leg and into the control box. Verify that the connectors are straight and fully seated	
	Are there any visible damages on the cables, controls, control box or legs?	• If damaged, those parts must be replaced- contact Customer Service at (###) ###-####	
The desk stops and can only run in the opposite direction	Is the desk in the full up or full down position?	• Reinitialize the base by pressing the up and down arrow keys at the same time until the base moves to its very bottom most position.	
	Is there anything that is interfering with the table base or work surface?	• Assure a gap of 1" around all moving parts, that no objects such as garbage cans or other items can come in to contact with the moving table.	
	Is there too much load on the desk, compared to previous working configuration?	• Remove some of the load from the tabletop then reinitialize by pressing the up and down arrow keys at the same time until the base moves to its very bottom most position.	
The desk won't run its fully intended travel range/stopping at the same point.	Check to see that a new saved minimum/maximum stopping point wasn't created.	• Reset the memory to clear the settings by holding down the "S" button and then the "2" button on the keypad for 3 seconds or until the letter "C" appears on the screen indicating that the clearing operation is complete.	
One or more of the legs rise at different rates.	Check connection cables (unplug and re-insert connector) between control box and legs are correctly connected and have no visible damage.	• If connection cables are fully connected (after unplugging and re-inserting connector) with no visible damage, then reinitialize base and retry operation. • If table is still malfunctioning connect a different functional control box if possible and reinitialize, if normal operation is restored then the initial control box is defective. However, if legs are still malfunctioning then they are defective and must be replaced. Malfunctioning parts can be replaced by contacting Customer Service at (###) ###-####	

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OTHER USEFUL INFORMATION

SETTING MEMORY SETTINGS
To set memory positions, please follow these steps:
1. Press and hold the down OR up button to raise table to the desired height.

2. Press the "S" Button, then press the "1," "2" or "3" buttons. The current height of the table will be saved in the selected position (1, 2 or 3).

SETTING MINIMUM HEIGHT
1. Press and hold the down button until it reaches the desired position.
2. Press and hold the "S" button, then press and hold the "1" button. Do this for at least 3 seconds.
3. The letter "L" will appear on the screen indicating that the position is now "locked."

SETTING MAXIMUM HEIGHT
1. Press and hold the up button until it reaches the desired position.
2. Press and hold the "S" button, then press and hold the "3" button for at least 3 seconds.
3. The letter "L" will appear on the screen indicating that the position is now "locked."

TO CLEAR SETTINGS
1. Press and hold the "S "button, then press and hold the "2" button. Do this for at least 3 seconds.
2. The letter "C" will appear on the screen indicating the positions are "clear."

CHANGING THE HEIGHT READOUT
1. Press the "S" button and the up button for 3 seconds. The first digit will begin to blink.
2. Press the up or down button to change the number to the desired height.
3. Repeat the above sequence to adjust each digit.