

TECHNICAL INFORMATION
B 890 and B 990 Rotary Irons (US Models)

Technical Information

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A Warning and Safety Instructions

1 General

Service and repair work should only be carried out by suitably qualified persons in accordance with all appropriate local and national safety regulations.

Servicing, modification, testing and maintenance of electrical appliances should only be carried out in accordance with all appropriate legal requirements, accident prevention regulations and valid standards.

Do not work on the iron while it is carrying voltage. If this becomes unavoidable, as in the process of locating faults, put extra safety measures into place.

Before any service work is started, the machine must be disconnected from the power supply.

Even with the machine switched off, supply voltage may be applied to some components.

A general visual check should always be carried out.

After work has been completed, a touch current measurement should be carried out on all accessible conductive parts that are not connected to ground.

Danger!

There may be a risk of injury due to sharp edges. Protective gloves and goggles should be worn and the edge protection, mat. no. 05057680, should be used.

Danger!

Do not connect the rotary iron to an extension cord. Extension cords do not guarantee the required safety of the appliance (e.g., danger of overheating).

Note:

If it is necessary to change the plug or power cord of the rotary iron, please take note of the following color codes of the wires:

- Green/yellow = Ground
- Blue = Live 1
- Brown = Live 2

Warning!

This appliance must be **grounded**.

Technical Information

2 Touch Current Measurement**Note:**

Touch current measurement should be carried out on all accessible conductive parts that are not connected to ground.

Warning!

Touch current measurement should only be carried out after the ground connection of the appliance under test has been checked and found to be satisfactory!

Dangerous voltages may exist on defective machines as well as on accessible conductive parts that are not connected to ground!

Note:

No touch current measurement is necessary.

3 Risk of Injury Due to Tilting Mechanism**Warning!**

When working on the appliance, the table and stand may tilt together/apart unintentionally and this could cause injury.

The ironing table and stand are linked via a tilting mechanism. In its transport (upright) position, the tilting mechanism is under tension; in its working (horizontal) position, the tension in the table spring is released.

- Before working on the appliance, tilt the ironing table into the working (horizontal) setting and lock it in place.
- When working under the ironing table, tilt the complete appliance onto its back.

B Modification History

When	Who	What
3/8/2011	Jessica Naples	Conversion for Website
11/10/2008	Liane Westerhelweg	Version 4
8/19/2008	Liane Westerhelweg	Version 3
11/20/2003	Olaf Meyer zu Drewer	Version 2
6/29/1999	Jürgen Peller	Version 1

C Technical Data

Model	B 890, B 990
Type	Transportable folding unit for domestic use
External dimensions, operating position	Height x width x depth: 37" x 39.4" x 16.4"
External dimensions, storage (folded) position	Height x width x depth: 41.8" x 16.4" x 16.4"
Weight	Approx. 84 lbs
Max. floor load in operation	84 lbs.
Casing	Extruded aluminum, powder-coated
Heater plate	
Material	Extruded aluminum
Surface	Hard anodized
Length	32.7"
Ironing surface area	145.7 square inches
Ironing pressure	74 lbs
Temperature control	Temperature regulator 86 - 392°F
Heating time to 392°F	Approx. 2 min 45 sec
Roller	
Length	32.7"
Diameter w/padding	6.3"
Roller base material	Galvanized sheet steel
Roller padding	Polyester needle felt
Roller cover	Cotton nettle cloth
Roller speed	5 steps, from 6 to 15 ft/min
Drive: Roller/Heater plate	
Motor (M17, M18)	24VDC, 60W motors (on rollers with geared drive)
Power ratings	
Heating	See data plate
Electrical connection	120VAC 60Hz (US models only)
Fuse rating	20A (US models only)
Current draw	13A (US models only)
Power cord	NEMA 5-15 plug (US models only)
Total rated load	See data plate
Test certificates	VDE with CCA, EMV

Table C-1: US Technical Data

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The appliance is supplied with a power cord and NEMA 5-15 plug, ready for connection to an AC single-phase 120V 60Hz supply. The fuse rating is 20 amps. The actual amperage draw from the appliance is 13 amps.

All electrical work should be carried out by a qualified electrician in accordance with local and national safety regulations.

Do not connect the rotary iron to an extension cord. Extension cords do not guarantee the required safety of the appliance (e.g., danger of overheating).

Important!

If it is necessary to change the rotary iron's plug or power cord, please take note of the following color codes of the wires:

Green/Yellow = Ground

Blue = Live 1

Brown = Live 2

Warning!

This appliance **must be grounded**.

D **Layout of Electrical Components**

The layout for the B 890 and B 990 is also included in the wiring diagram.

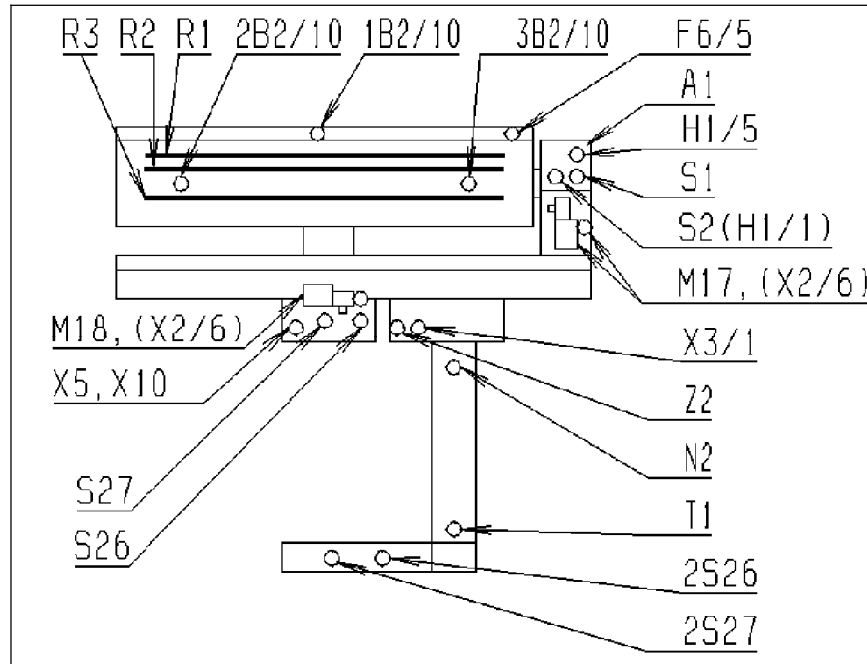


Figure D-1: Layout of Electrical Components

- A1** Control panel/electronic
- B2/10** Temperature control, heater plate
- F6/5** Safety switch, finger guard
- H1/1** On/Off LED
- H1/5** Heating LED
- M17** Roller motor
- M18** Motor, heater plate drive
- N2** Main electronic
- R1-R3** Heater elements
- S1** Selector switch
- S2** On/Off switch
- S26, 2S26** Switch, heater plate off roller
- S27, 2S27** Switch, heater plate on roller
- T1** Transformer
- X2/6** Plug connector, motor
- X3/1** Terminal block
- X5, X10** Coupling
- Z2** Interference suppression capacitor

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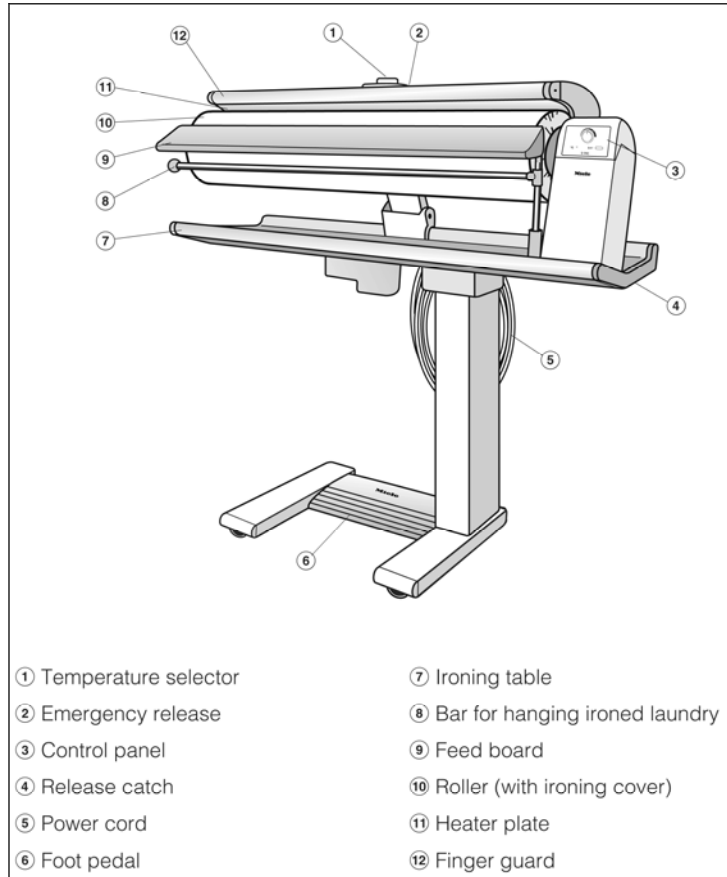
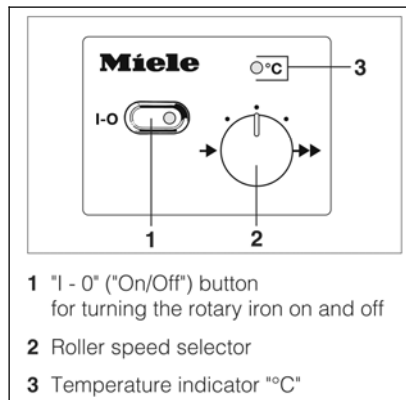
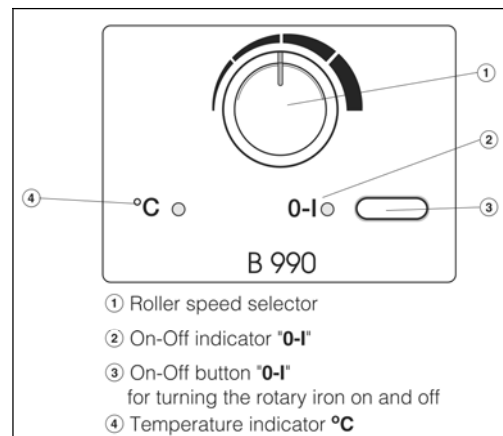


Figure D-2: Overview of Rotary Iron



- 1 "1 - 0" ("On/Off") button for turning the rotary iron on and off
- 2 Roller speed selector
- 3 Temperature indicator "°C"

(a)

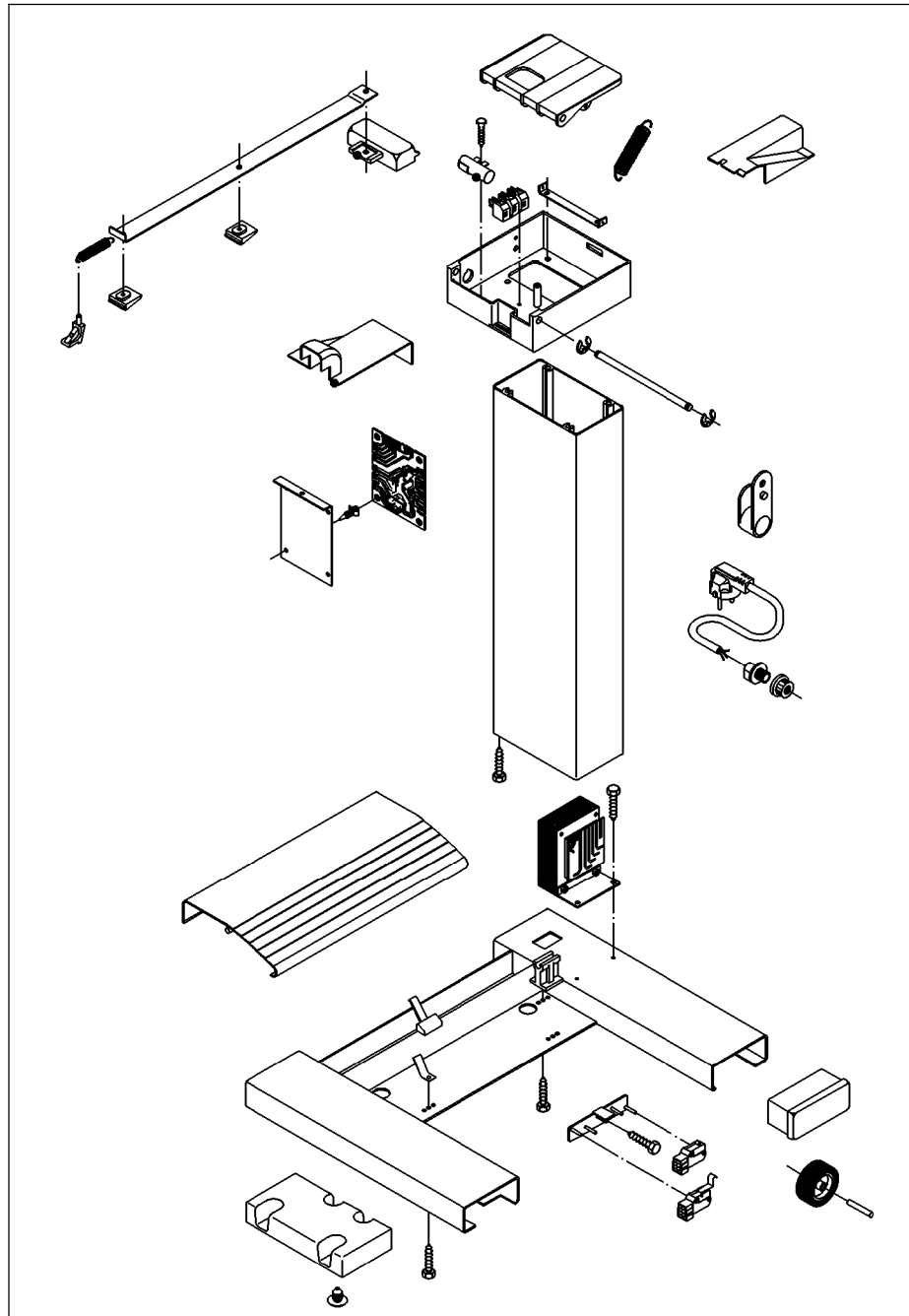


- 1 Roller speed selector
- 2 On-Off indicator "0-I"
- 3 On-Off button "0-I" for turning the rotary iron on and off
- 4 Temperature indicator °C

(b)

Figure D-3: Overview of (a) B 890 and (b) B 990 Controls

010 Stand



Technical Information

2 Function**2.1 Main Electronic**

The B 890 and B 990 are equipped with two (2) separate electronic board assemblies: the control electronic (A1), illustrated in Section 050-2.2, and the main electronic (N2). The main electronic is located beneath a cover on the top of the stand, and is responsible for providing power to components. See Figures 010-1 and 010-2.

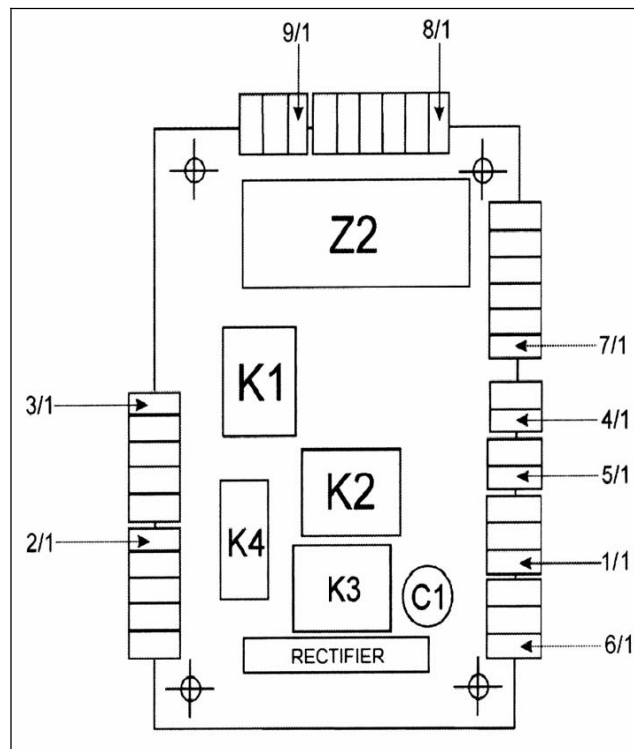


Figure 010-1: Main Electronic N2, B 890

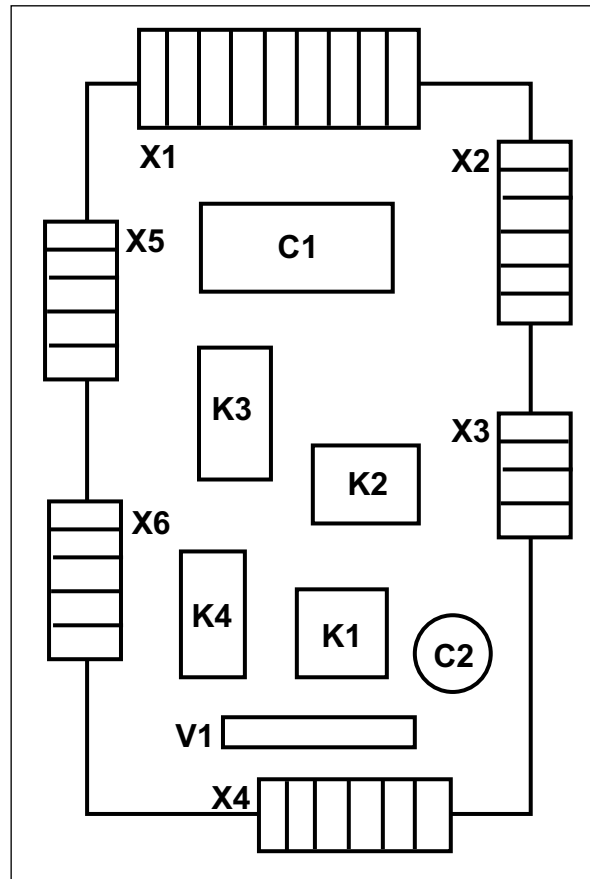


Figure 010-2: Main Electronic N2, B 990

2.2 Transformer

The transformer is mounted to the base plate, and is covered by the stand. The transformer is responsible for reducing voltage from 120VAC to 24VDC for the electronic and several other components.

2.3 Foot Switches (2S26 and 2S27)

The foot switches are mounted below the foot plate and are actuated by the user to engage the heater plate to the roller and to provide drive to the roller assembly.

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3 Fault Repair**3.1 Foot Switch Does Not Operate the Roller****Cause:**

Switch defective.

Remedy:

Replace the foot switch; see Section 010-4.1.

4 Service**4.1 Foot Switch (2S26, 2S27) Removal**

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Lay the iron on its back, on a mat or blanket to prevent scratching.
3. Remove the two T20 screws next to the two access holes underneath the foot plate.
4. Remove the pedal.
5. Remove the T20 screw securing the switch holder.
6. Disconnect the wiring harness from the appropriate switch and remove the switch.

Note:

When re-inserting the bottom screws, slide the plastic holder/spring assemblies into the correct positions so that the guide pins engage in their holes.

4.2 Main Electronic (N2) Replacement

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Lay the iron on its back, on a mat or blanket to prevent scratching.
3. Tie a sturdy cord (such as twine) to the J-hook at the bottom of the spring.
4. Release tension from the Bowden cable by disconnecting the tension spring. Grab the J-hook at the bottom of the spring with pliers and pull it off of the base to disengage the spring.

Warning!

With the spring disconnected, movement of the ironing table will be unrestricted because there is no tension holding it in place.

5. Bring the iron to its upright, stowed position (see the operating manual).
6. Remove the main electronic's cover (T20 screw) from the stand (Figure 010-3, Item 1).

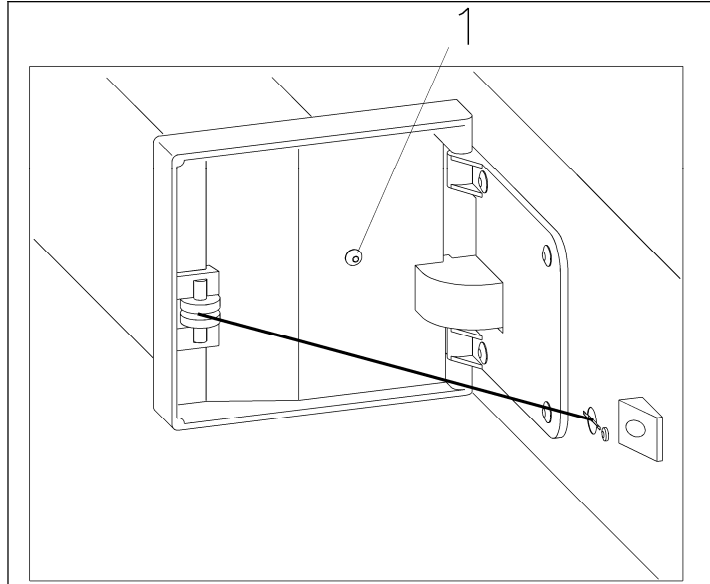


Figure 010-3: Main Electronic Cover

7. Remove the T20 screw securing the main electronic to the stand (Figure 010-4, Item 1). Slide the main electronic out of the stand.

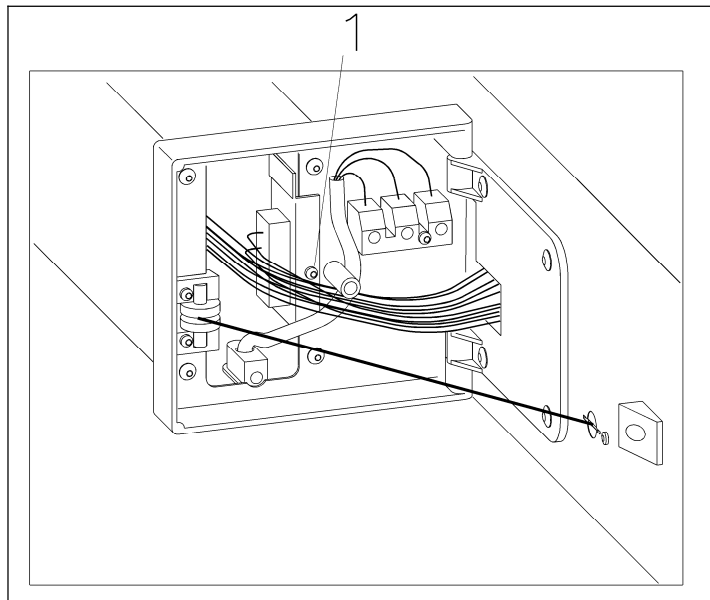


Figure 010-4: Main Electronic Screw

8. Disconnect all connections from the old electronic and connect them on the new electronic, one at a time. This prevents incorrect connection.
9. Remove the holder from the old electronic and place it on the new electronic.
10. Install the new electronic with holder.
11. Tilt the ironing table to its horizontal position; see Section 020-4.1.
12. Lay the iron on its back again.
13. Ensure that the Bowden cable is centered on its pulley, taping it in place if

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necessary, and then feed the Bowden cable/spring assembly as far down the stand as possible. Pull the twine or cord through the bottom of the stand and tie or tape it down.

14. Grab the J-hook with pliers and reattach it to the base.
15. Check for smooth operation by unlocking the ironing table and moving it to the stowed (vertical) position; if binding or unusual noises occur, unhook the spring and check that the Bowden cable is centered on its pulley.
16. If operation is smooth, re-install the main electronic cover and secure it with the T20 screw.

Note:

When the cable guide (plastic "neck") on the cover pushes against the hinge after reassembly, the cover can break when the iron is folded.

4.3**Transformer Removal**

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Lay the iron on its back, on a mat or blanket to prevent scratching.
3. Tie a sturdy cord (such as twine) to the J-hook at the bottom of the spring.
4. Release tension from the Bowden cable by disconnecting the tension spring. Grab the J-hook at the bottom of the spring with pliers and pull it off of the base to disengage the spring.

Warning!

With the spring disconnected, movement of the ironing table will be unrestricted because there is no tension holding it in place.

5. Bring the iron to its upright, stowed position (see the operating manual).
6. Remove the main electronic's cover (T20 screw) from the stand (Figure 010-3, Item 1).
7. Remove the T20 screw securing the main electronic to the stand (Figure 010-4, Item 1).
8. Slide the main electronic out of the stand.
9. Disconnect the transformer and foot switch wiring harnesses (all Molex) from the main electronic.
10. Lay the iron on its back again.
11. Remove the four T30 bolts from the underside of the base.
12. Carefully remove the base.
13. Disconnect the 2 Molex plugs from the transformer.
14. Remove the 2 Phillips screws securing the transformer to its mounting bracket.
15. Remove the transformer from its mounting bracket.

4.4**Transformer Replacement, Base/Stand Reassembly**

1. Bring the iron to its upright, stowed position (see the operating manual).
2. Lay the iron on its back, on a mat or blanket to prevent scratching.
3. Secure the new transformer to the mounting bracket with the 2 Phillips screws and reconnect the 2 Molex connections.
4. Feed the transformer and foot switch wiring harnesses back through the

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- stand and reconnect them to the main electronic.
5. Re-install the main electronic. Do not re-install the electronic's cover.
 6. Tilt the ironing table to its horizontal position; see Section 020-4.1.
 7. Lay the iron on its back again.
 8. Ensure that the Bowden cable is centered on its pulley, taping it in place if necessary, and then feed the Bowden cable/spring assembly as far down the stand as possible. Pull the twine or cord through the bottom of the stand and tie or tape it down.
 9. Re-install the base, securing it in place with the four T30 bolts.
 10. Grab the J-hook with pliers and reattach it to the base.
 11. Check for smooth operation by unlocking the ironing table and moving it to the stowed (vertical) position; if binding or unusual noises occur, unhook the spring and check that the Bowden cable is centered on its pulley.
 12. If operation is smooth, re-install the main electronic cover and secure it with the T20 screw.

Note:

When the cable guide (plastic "neck") on the cover pushes against the hinge after reassembly, the cover can break when the iron is folded.

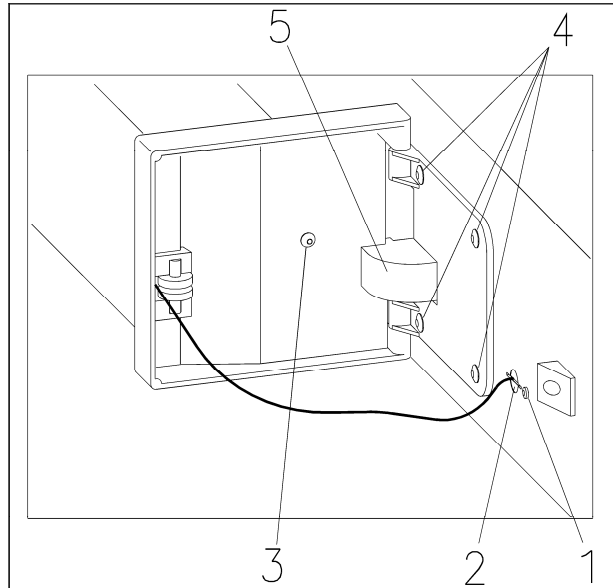
4.5 Bowden Cable Replacement

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Lay the iron on its back, on a mat or blanket to prevent scratching.
3. Tie a sturdy cord (such as twine) to the J-hook at the bottom of the spring.
4. Release tension from the Bowden cable by disconnecting the tension spring. Grab the J-hook at the bottom of the spring with pliers and pull it off of the base to disengage the spring.

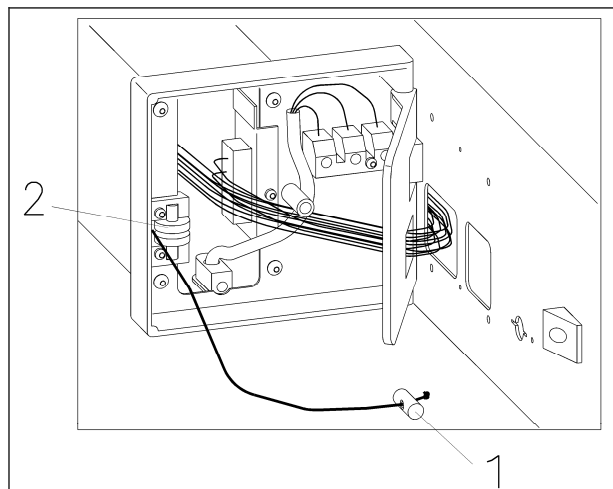
Warning!

With the spring disconnected, movement of the ironing table will be unrestricted because there is no tension holding it in place.

5. Bring the iron to its upright, stowed position (see the operating manual).
6. Place a block of wood or similar between the ironing table and the base to stabilize the table.
7. Remove the T20 screw securing the Bowden cable holder (Figure 010-5, Item 1).
8. **Carefully** press the Bowden cable holder into the table (Figure 010-5, Item 2).
9. Remove the T20 screw securing the main electronic cover (Figure 010-5, Item 3).
10. Remove the four T20 screws securing the plastic hinge (Figure 010-5, Item 4).

Technical Information**Figure 010-5: Bowden Cable and Plastic Hinge**

11. **Carefully** remove the Bowden cable holder from the table, via the opening behind the hinge. This holder is very small and can fall inside the table!
12. Remove the Bowden cable pin from the table (Figure 010-6, Item 1).
13. Remove the two T20 screws securing the pulley axle to the stand (Figure 010-6, Item 2).

**Figure 010-6: Bowden Cable Holder and Pulley**

14. Remove the pulley axle, pulley, and entire Bowden cable/spring assembly from the stand.
15. Tie a sturdy cord (such as twine) to the J-hook at the end of the spring on the new Bowden cable.
16. Feed the Bowden cable pin through the round opening in the table and then through the opening behind the hinge to the outside of the table (Figure 010-7, Item 1).

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17. Install the Bowden cable pin and Bowden cable cord in the Bowden cable holder (Figure 010-7, Item 3).
18. Feed the Bowden cable back into the table; insert through the round opening and hold in place.
19. Secure the retaining screw in the Bowden cable holder (Figure 010-7, Item 2).

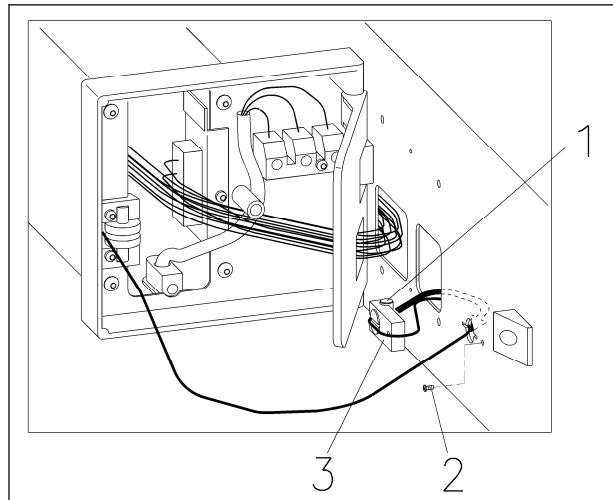


Figure 010-7: Bowden Cable Pin

20. Re-install the hinge (Figure 010-4, Item 4).
21. Ensure that the Bowden cable is centered on its pulley, taping it in place if necessary, and then feed the Bowden cable/spring assembly as far down the stand as possible. Pull the twine or cord through the bottom of the stand and tie or tape it down.
22. Grab the J-hook with pliers and reattach it to the base.
23. Check for smooth operation by unlocking the ironing table and moving it to the stowed (vertical) position; if binding or unusual noises occur, unhook the spring and check that the Bowden cable is centered on its pulley.
24. If operation is smooth, re-install the main electronic cover and secure it with the T20 screw.

Note:

When the cable guide (plastic “neck”) on the cover pushes against the hinge after reassembly, the cover can break when the iron is folded.

4.6

Handle Replacement

1. Remove the two T20 screws securing the right end cap from the ironing table (Figure 010-8, Item 1).
2. Tilt the ironing table to its horizontal position; see Section 020-4.1.
3. Lay the iron on its back, on a mat or blanket to prevent scratching.
4. Remove the cover from the heater plate motor (two T20 screws) (Figure 010-8, Item 2).
5. Disconnect the two ground wires (green/yellow) from the motor bracket.
6. Remove the two T20 screws securing the top of the motor bracket (Figure

Technical Information

- 010-8, Item 3).
7. Remove the two T20 screws securing the bottom of the motor bracket.
 8. Lift the base of the iron slightly, so that the plate and table are pressed together and the heater plate motor comes out of the table in one piece.

Note:

There is a wire loop at the base of the motor that holds the motor wiring harnesses in place inside the table.

9. Remove the locks (T20 screws) (Figure 010-8, Item 5).
10. Release the handle by reaching inside the right side of the table and pushing up and in on the handle (Figure 010-8, Item 6).
11. Remove the T20 screw securing the spring holder (next to Figure 010-8, Item 4), remove the spring holder and pull the handle assembly out of the right side of the table.

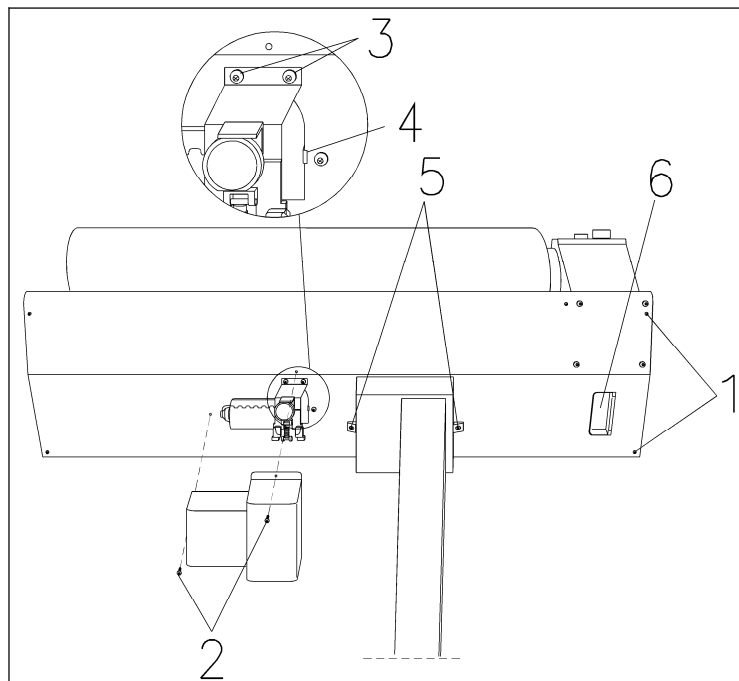


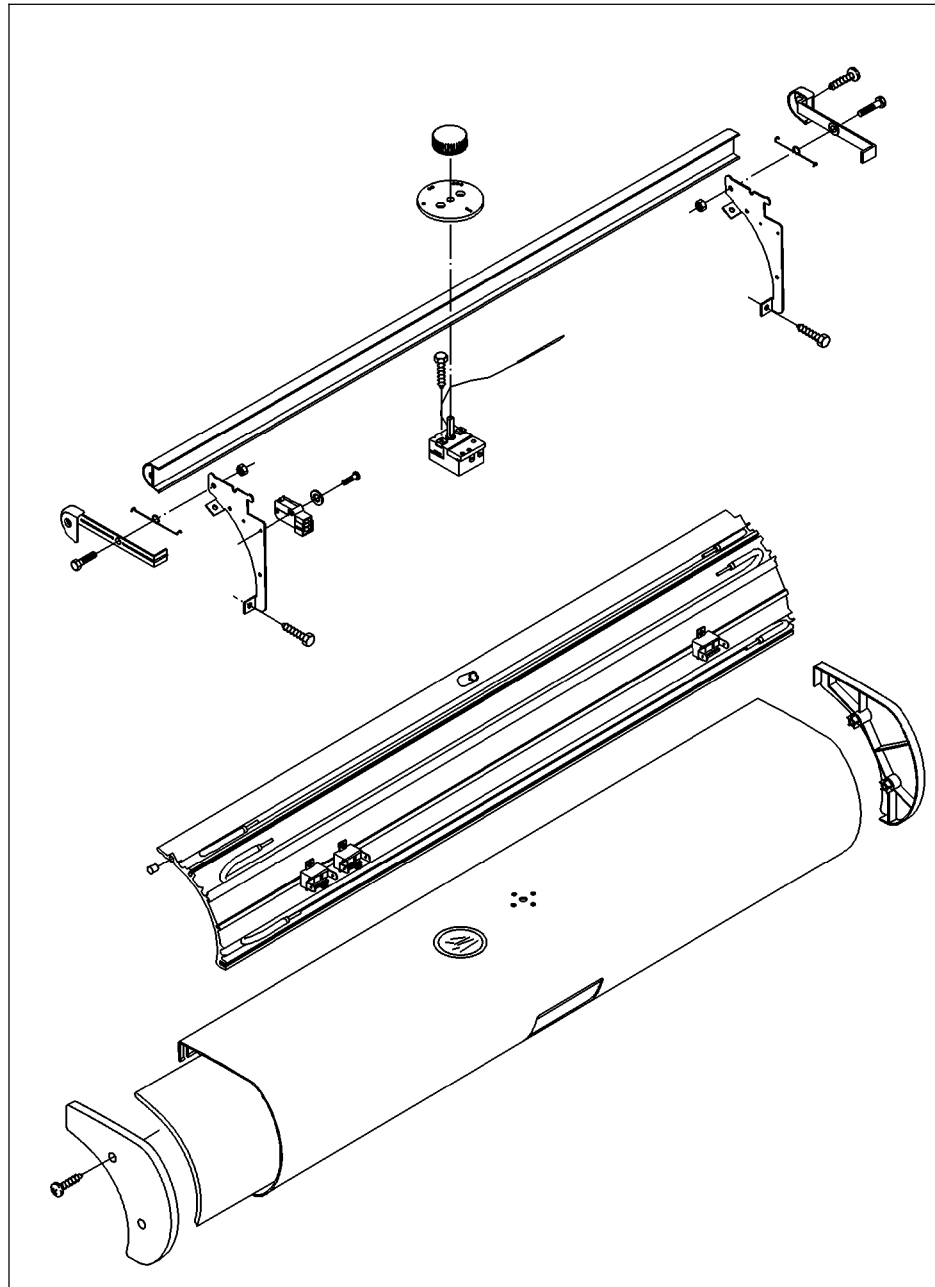
Figure 010-8: Handle Removal

12. Remove the T20 screw securing the handle to its mounting bar and remove the handle.
13. After replacing the handle, re-assemble the iron by following the above instructions in reverse order.

Warning!

Locks can be re-installed backwards!

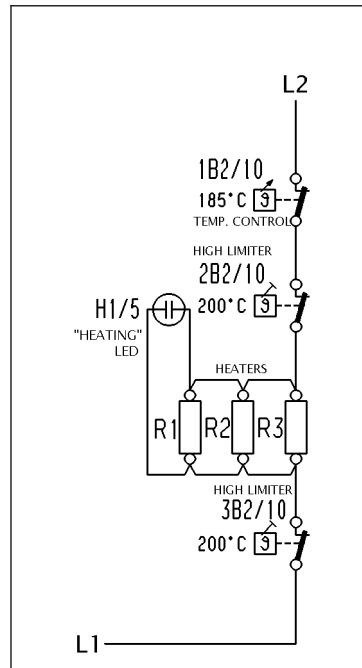
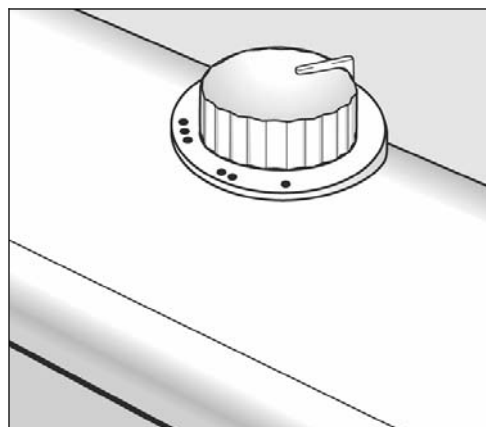
020 Heater Plate



Technical Information

2 Function**2.1 Heater Circuit**

The heater plate contains three heater elements within a parallel circuit (1kW/52Ω per element). (Refer to the wiring diagram.) The temperature is regulated using an adjustable temperature control device (see the operating manual) mounted in series before the heating elements. In addition, the heating circuit contains two thermal hi-limit cutouts, also electrically connected in series to the heating elements. Should the temperature exceed 392°F (200°C), the circuit will be electrically interrupted.

**Figure 020-1: Heater Electrical Circuit****Figure 020-2: Heater Temperature Control**

2.2 Finger Guard Switch

The finger guard is the small lip in the front of the heater plate assembly that can be lifted slightly. The finger guard switch is actuated if the finger guard is lifted or moved from its regular position. This system ensures that, if the operator should accidentally make contact with the heater plate while the roller is turning, power is interrupted to prevent injuries.

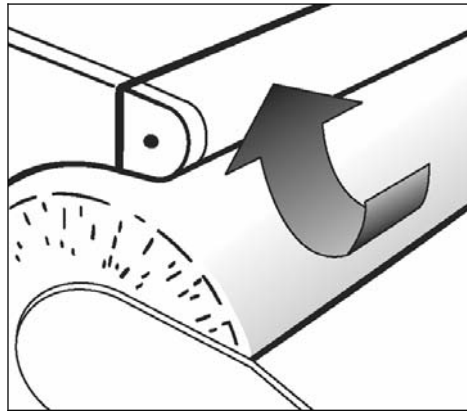


Figure 020-3: Finger Guard

3 Fault Repair

3.1 When Pressing the Foot Switch: Roller Rotates, No Heater Plate Function

Symptom:

After the foot switch is pressed, the roller rotates but the heater plate does not move up or down.

Cause:

Microswitch defective.

Remedy:

1. Check the foot switch (2S26, 2S27).
2. Check the heater plate microswitch (S26, S27)

Cause:

The heater plate microswitch (S26, S27) is not adjusted correctly.

Remedy:

Adjust the heater plate microswitch (S26, S27) through the mounting hole.

Cause:

Weak plastic springs in the foot switch (2S26, 2S27).

Remedy:

After machine no. 46654842, additional springs were incorporated to increase the strength of the plastic springs.

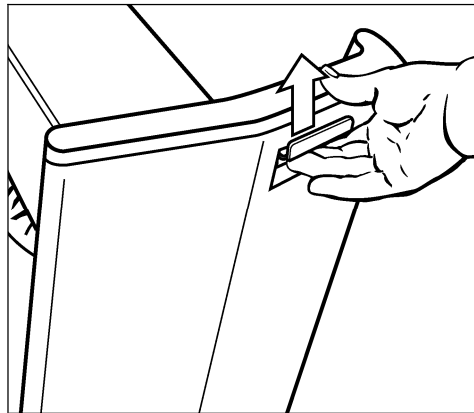
To increase the strength of the plastic springs, install an additional spring.

Cause:

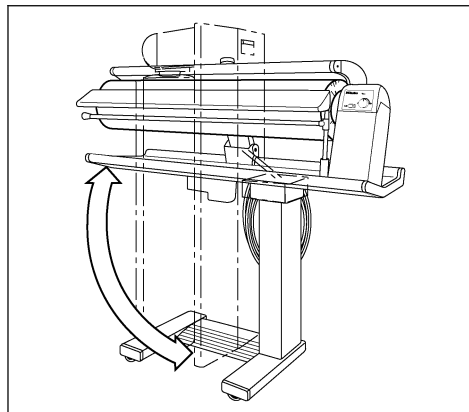
Defective relay on main electronic.

Technical Information**Remedy:**

1. Check the input voltage to the heater plate.
2. Check the output voltage to the heater plate.
3. If there is input voltage but no output voltage, replace the main electronic.
See Section 010-4.2.

4 Service**4.1 Tilting the Ironing Table Horizontally****Figure 020-4: Handle (Locking Catch)**

1. Lift the handle (locking catch) at the right under the table and hold the table.

**Figure 020-5: Locking the Iron in Place**

2. Tilt the ironing table until it is horizontal and locks into place.

4.2 Opening the Heater Plate Cover

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Switch on the machine.
3. Operate the foot switch to lower the heater plate onto the roller.
4. Switch off the machine and unplug it from the power supply.

Technical Information

5. Remove the four T20 screws from the left and right end caps (2 screws each).
6. Remove the left and right end caps.
7. Lift the cover at the top and carefully slide it down onto the lifting arm.

4.3 Insulation Matting Removal

1. Open the heater plate cover; see Section 020-4.2.
2. Disconnect all electrical connections.
3. Place the wiring harnesses to one side.
4. Take out the insulation matting.

Note:

Take care not to damage the matting cutouts when pulling it free of the switches.

4.4 Heater Element Replacement

1. Remove the insulation matting; see Section 020-4.3.
2. Disconnect the electrical connections.
3. Use a screwdriver to bend open the channels holding the heater element in the heater plate.
4. Remove the heater element.
5. Install the new heater element.
6. Use a hammer and chisel to carefully close the channels in the heater plate to secure the heater element back into place.

Warning!

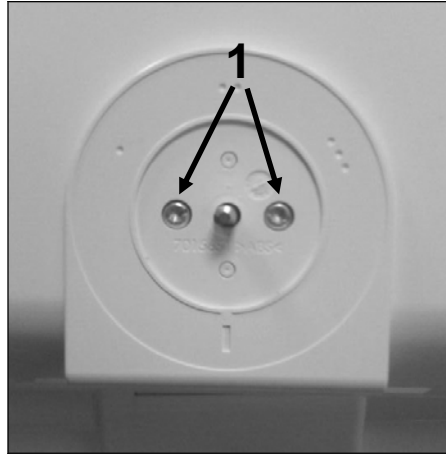
Take care not to indent the heater element outer covering as the internal heating conductor could be damaged.

Note:

Only replace a heater element with one of identical power rating.

4.5 Temperature Regulator Sensor (1B2/10) Replacement

1. Remove the insulation matting; see Section 020-4.3.
2. Lever off the switch knob with a lid opener or yellow Miele tool and remove it with the fascia.
3. Remove the T20 screws from the temperature regulator. See Figure 020-6, Item 1.
4. Remove the temperature regulator.

Technical Information**Figure 020-6:** Temperature Regulator Screws

5. Disconnect the plug connections and connect them on the new temperature regulator, one at a time. This prevents incorrect connection.
6. Use a screwdriver to bend open the channels holding the temperature regulator sensor on the heater plate.
7. Remove the temperature regulator sensor from the guide to the side.
8. Slide the new temperature regulator sensor into the guide from the side to the same position as before.
9. Use a hammer and chisel to carefully close the channels in the heater plate to secure the new sensor.

Warning!

When closing the channels, take care not to damage the temperature sensor.

10. Reassemble by following these instructions in reverse order.
11. Check for correct operation.

4.6 High-Temperature Cutout (2B2/10, 3B2/10) Replacement

1. Remove the insulation matting; see Section 020-4.3.
2. Disconnect the electrical connections from the appropriate high-temperature cutout.
3. Use a screwdriver to bend open the channels holding the cutout on the heater plate.
4. Remove the cutout sideways from its guide.
5. Slide the new cutout sideways into its guide to the same position as before.
6. Use a hammer and chisel to carefully close the channels in the heater plate to secure the new cutout.

Note:

Hold the cutout vertically centered when closing the channels.

7. Reconnect the electrical connections.
8. Check for correct operation.

4.7 Finger Guard Switch (F6/5) Removal

Note:

The switching point of the finger guard strip cannot be modified.

1. Open the heater plate cover; see Section 020-4.2.
2. Remove the 2 T10 screws from the switch holder. See Figure 020-7, Item 1.
3. Disconnect the switch connection. See Figure 020-7, Item 2.
4. Remove the switch.

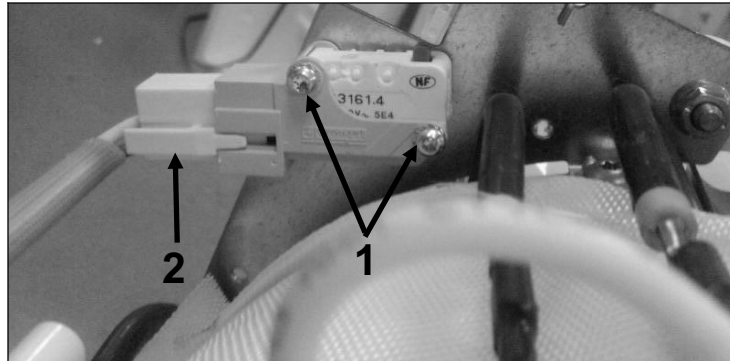
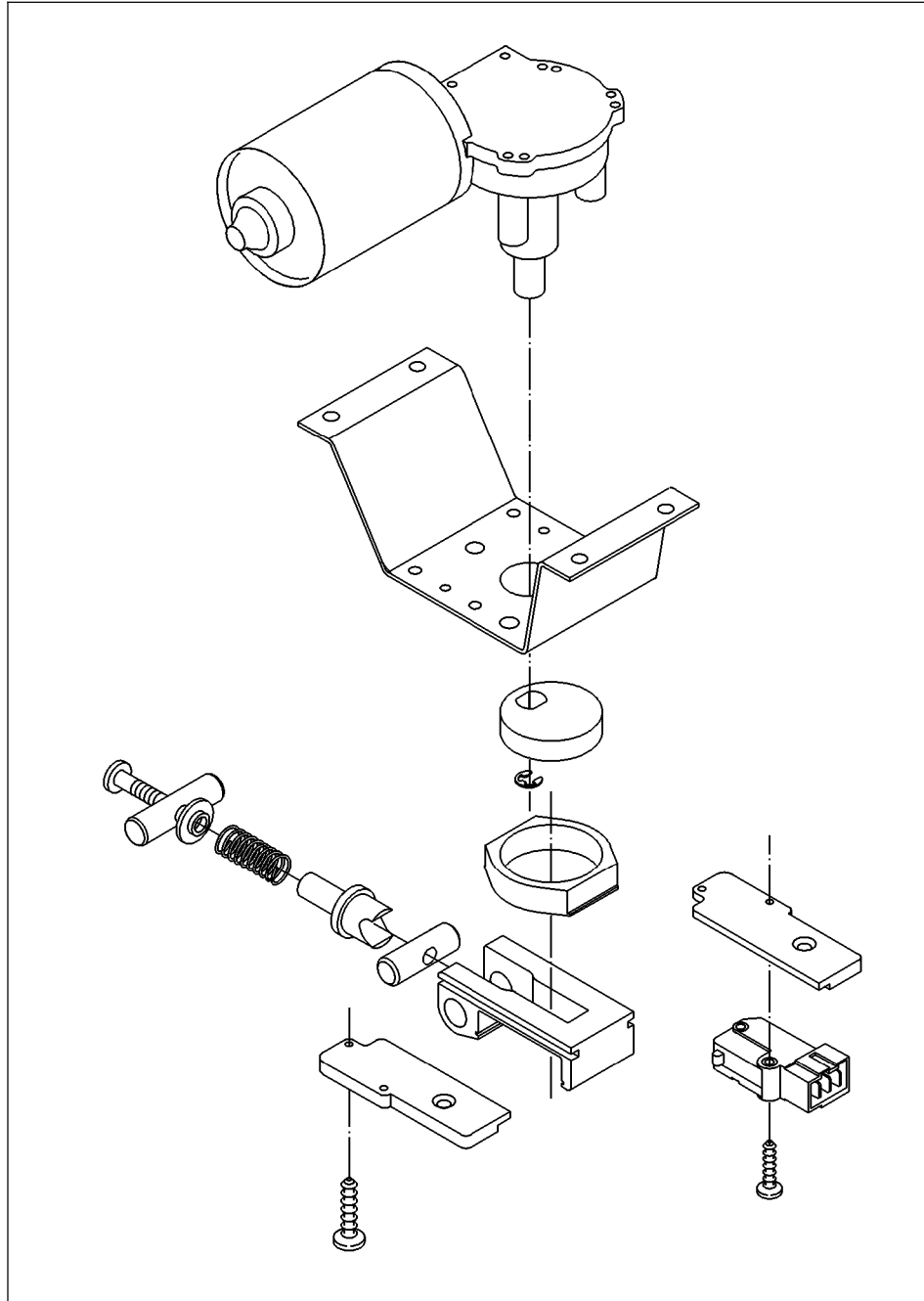


Figure 020-7: Finger Guard Switch

Technical Information

030 Heater Plate Motor

2 Function

2.1 Motor Operation

The heater plate drives are actuated by the user via the foot plate (refer to Section 010-2.3). The drive motor (Figure 030-1, Item 6) is then energized with 24VDC. The shaft of the drive motor is connected to the eccentric cam (Figure 030-1, Item 7) via an E-clip connection (Figure 030-1, Item 5); as the drive motor turns, the eccentric cam rotates. The rotation of the eccentric cam moves the guide strips (Figure 030-1, Item 4) and applies pressure to the spring (Figure 030-1, Item 1), causing the heater plate to close against the roller. Power to the motor is interrupted as the guide strip actuator contacts the “plate on roller switch” (Figure 030-1, Item 2), leaving the heater plate against the roller for ironing.

When the user releases the foot pedal, the drive motor is energized in the opposite direction. The eccentric cam rotates; pressure is released from the spring and the heater plate moves away from the roller. The drives continue until the “plate off roller switch” (Figure 030-1, Item 3) is actuated by the guide strip.

Note:

The raising and lowering path cannot be adjusted.

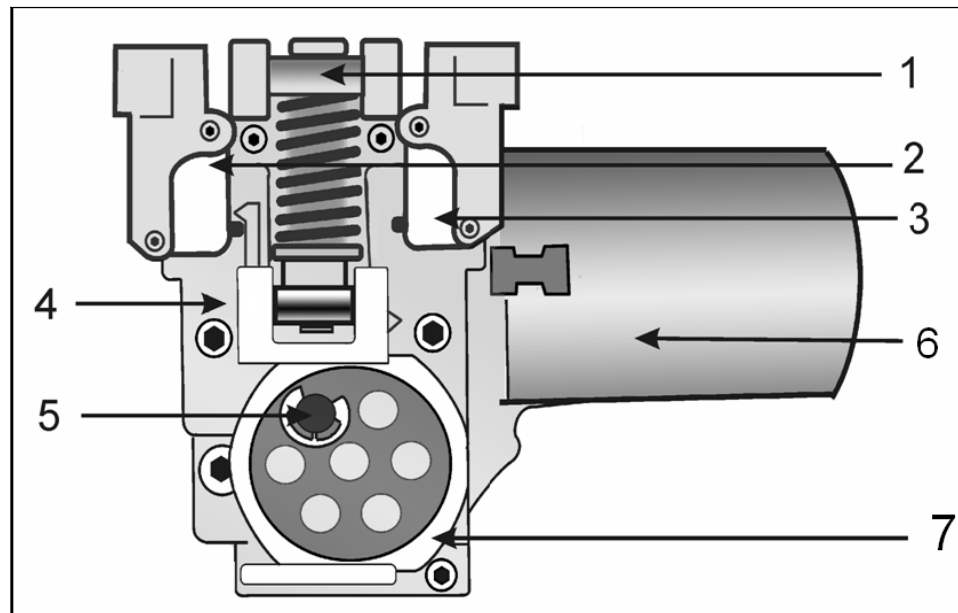


Figure 030-1: Heater Plate

- 1 Pressure spring
- 2 S27 - Plate on roller switch
- 3 S26 - Plate off roller switch
- 4 Heater plate guide strips (two)
- 5 Motor shaft and E-clip retainer
- 6 M18 - Motor
- 7 Eccentric cam

Technical Information

4 Service**4.1 Microswitch (S26, S27) Removal**

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Remove the cover from the heater plate motor (two T20 screws) (Figure 010-6, Item 2).
3. Disconnect the plug from the appropriate switch.
4. Remove the 2 T10 screws from the appropriate switch.
5. Remove the switch.

Warning!

When re-installing, take care to ensure that the plugs are connected correctly, as they are not coded.

4.2 Heater Plate Motor (M18) Removal

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Remove the cover from the heater plate motor (two T20 screws) (Figure 010-6, Item 2).
3. Before starting work, note how the cables are laid so that they can be re-installed correctly.
4. Remove the T20 screws from the left and right plastic guide strips on either side of the cam. See Figure 030-1, Item 4.
5. Unsnap the strips from the motor bracket, then tilt them slightly and remove them.
6. Disconnect the Molex connection from the DC motor.
7. Remove the E-clip securing the shaft to the cam (Figure 030-1, Item 5).
8. Remove the four T20 screws securing the motor bracket to the table (top screws are shown in Figure 010-6, Item 3).

Note:

There is a wire loop at the base of the motor that holds the motor wiring harnesses in place inside the table.

9. Tilt the DC motor with its bracket down and out of the table.
10. Press the DC motor shaft out of the eccentric cam.
11. Remove the DC motor/bracket assembly.

Note:

When re-installing, ensure that the guide strips for the switches correctly snap into place on the motor bracket.

4.3 Hinge Pressure Spring Setting/Adjustment**Note:**

Settings should only be made with the heater plate lowered onto the roller.

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Lower the heater plate onto the roller.
3. Remove the cover from the heater plate motor (two T20 screws) (Figure

Technical Information

- 010-6, Item 2).
4. Unscrew the T30 bolt (Figure 030-2, Item 1) from the cross pin (Figure 030-2, Item 2).
 5. Apply Loctite 243 locking compound to the end of the bolt.
 6. Screw the bolt in so that the pressure spring is compressed to a length of approximately $1 \frac{3}{16}$ inches.

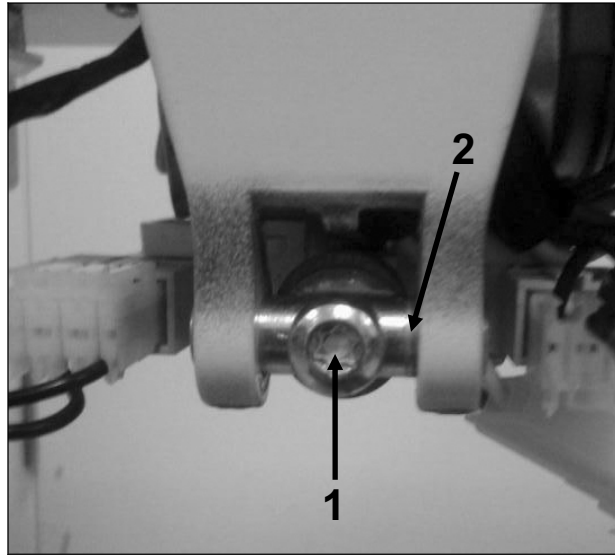


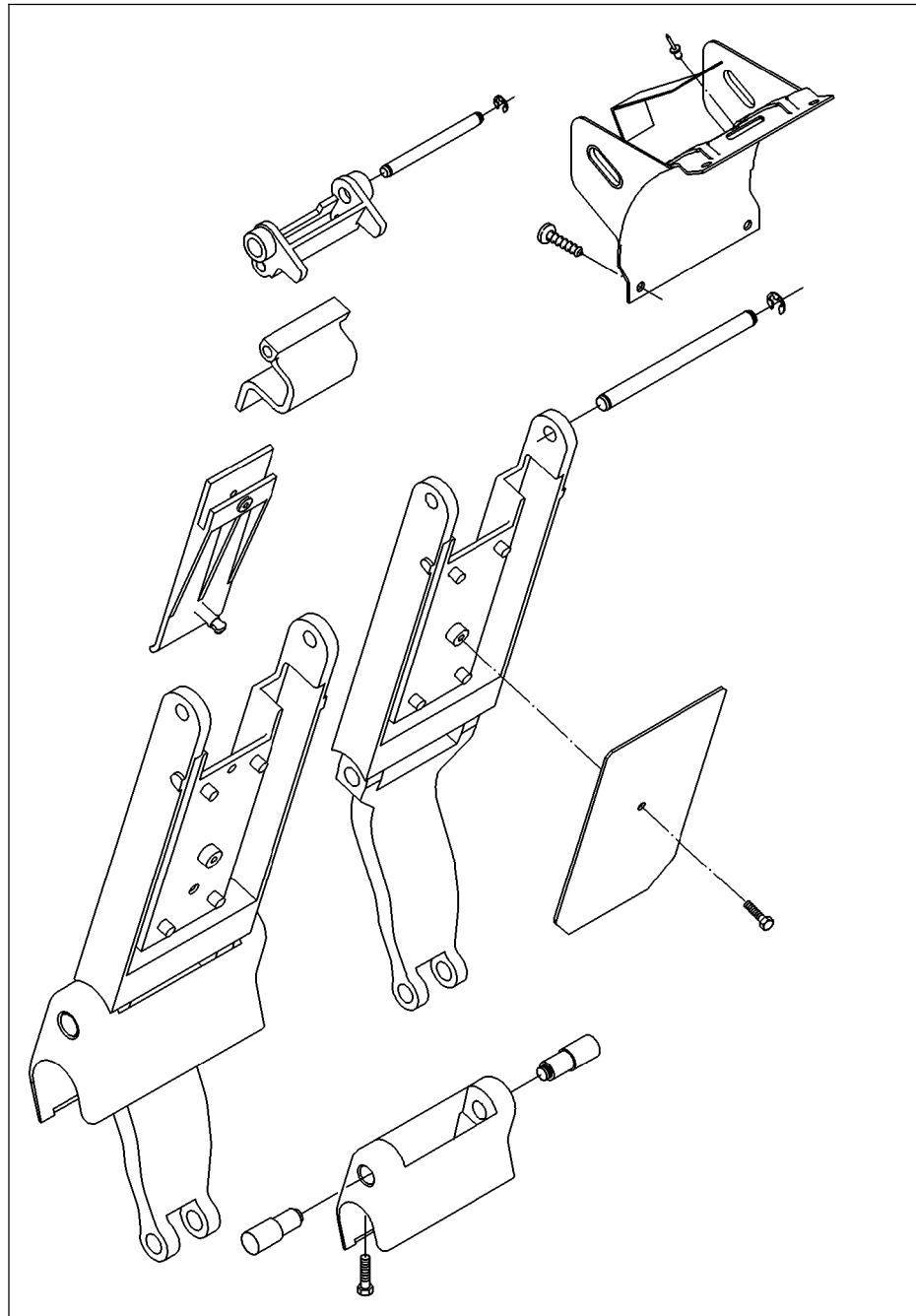
Figure 030-2: Hinge Pressure Spring Bolt and Cross Pin

Note:

After correct setting, the gap between the bolt head and the cross pin at the head of the bolt should be approximately $\frac{1}{16}$ of an inch with the heater plate lowered onto the roller.

Technical Information

035 Lifting Arm



3 Fault Repair

3.1 Emergency Release Does Not Allow Laundry to Be Removed

Cause:

Leaf spring defective.

Remedy:

Replace the leaf spring with holder; see Section 035-4.1.

3.2 Heater Plate Cannot Be Lowered Completely

Cause:

The emergency release springs open while the iron is in use. The faulty component here is the catch. When die-cast burrs are removed, the tabs on the catch are also partially ground down, making them no longer able to hold the catch in place.

Remedy:

Replace the emergency release catch.

4 Service

4.1 Leaf Spring with Holder Replacement

1. Open the heater plate cover; see Section 020-4.2.
2. Remove the insulation matting; see Section 020-4.3.
3. Release the emergency release (pull the handle upwards).
4. Remove only one of the larger E-clips securing the holder assembly to the lifting arm (Figure 035-1, Item 1).
5. Remove the washer underneath the E-clip.
6. Slide the hinge pin out of the lifting arm (Figure 035-1, Item 2).
7. Remove the wiring harness retaining clips from the holder (Figure 035-1, Item 3).
8. Disconnect the ground wire from the holder, if applicable.
9. Remove the holder retaining screws (four T20s) from the heater plate (Figure 035-1, Item 4).
10. Remove the holder.
11. Install the new holder.
12. Reassemble by following these instructions in reverse order.

Note:

If the emergency release does not allow laundry to be removed, the leaf spring may need replacement.

Technical Information

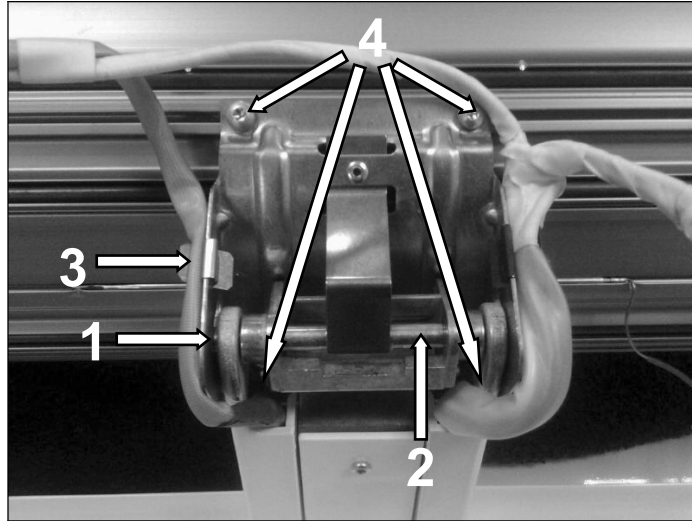
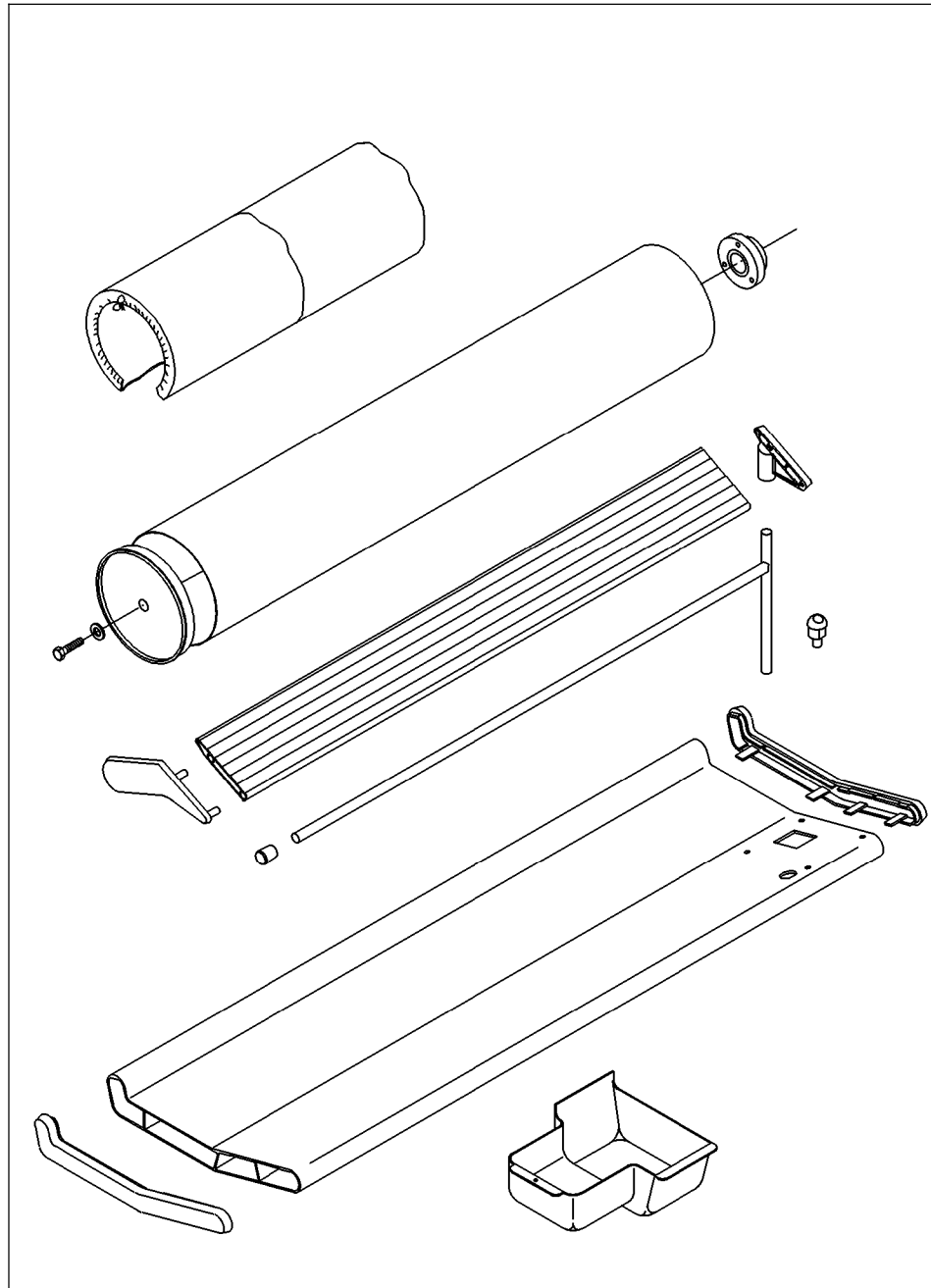


Figure 035-1: Leaf Spring and Holder

040 Roller



Technical Information

3 Fault Repair**3.1 Laundry Not Taken In****Cause:**

Ironing cloth is too smooth.

Remedy:

Replace the ironing cloth; see Section 040-4.2.

Note:

Wash the ironing cloth in a washing machine at 140°F (60°C) to raise the nap and roughen the surface.

3.2 Roller Does Not Turn or Only Turns with Difficulty**Cause:**

Free-wheel mechanism defective.

Remedy:

Replace the roller; see Section 040-4.1.

3.3 Roller Does Not Turn**Cause:**

DC motor defective.

Remedy:

Check the DC motor. See Section 050-4.4.

If the DC motor is in order, check the main electronic. See Section 010-4.2.

Cause:

Surface defects (nicks or grooves) on the shaft of the free-wheel mechanism.

Remedy:

Replace the drive shaft; see Section 050-4.2.

3.4 Roller Stops or Heater Plate Does Not Start**Symptom:**

This fault first occurs after a short operating period and, after that, only sporadically. Affects irons after machine no. 46969175.

Cause:

Relay on the main electronic does not switch or switches erratically.

Fluctuations in quality of the relay.

Remedy:

Replace the main electronic; see Section 010-4.2.

4 Service

4.1 Roller Removal

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.

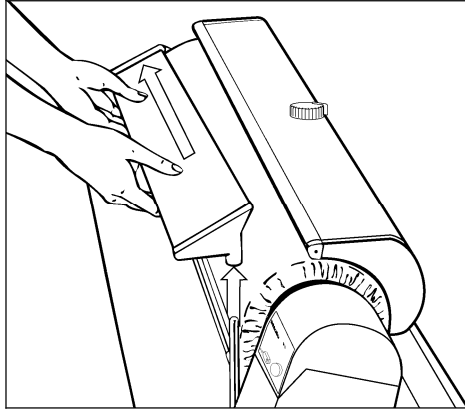


Figure 040-1: Feed Board Removal

2. Remove the feed board (Figure 040-1).
3. Remove the hanging rail.
4. Open the ironing cloth at the drawstring end. Complete removal of cloth is not necessary.

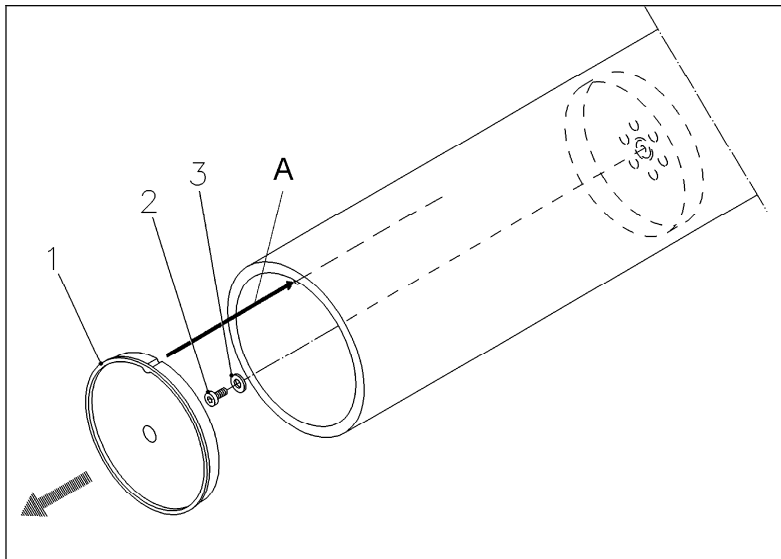


Figure 040-2: Roller Removal

5. Pull off the roller end cap (Figure 040-2, Item 1).

Note:

Adhesive residue may make it difficult to remove the end cap.

6. Remove the retaining screw (T30) and washer (Figure 040-2, Items 2 and 3) from the interior of the roller.
7. Remove the roller from the roller bar.

Technical Information

8. When replacing the end cap, ensure that its notch aligns with the tab on the interior of the roller. See Figure 040-2, Item A.

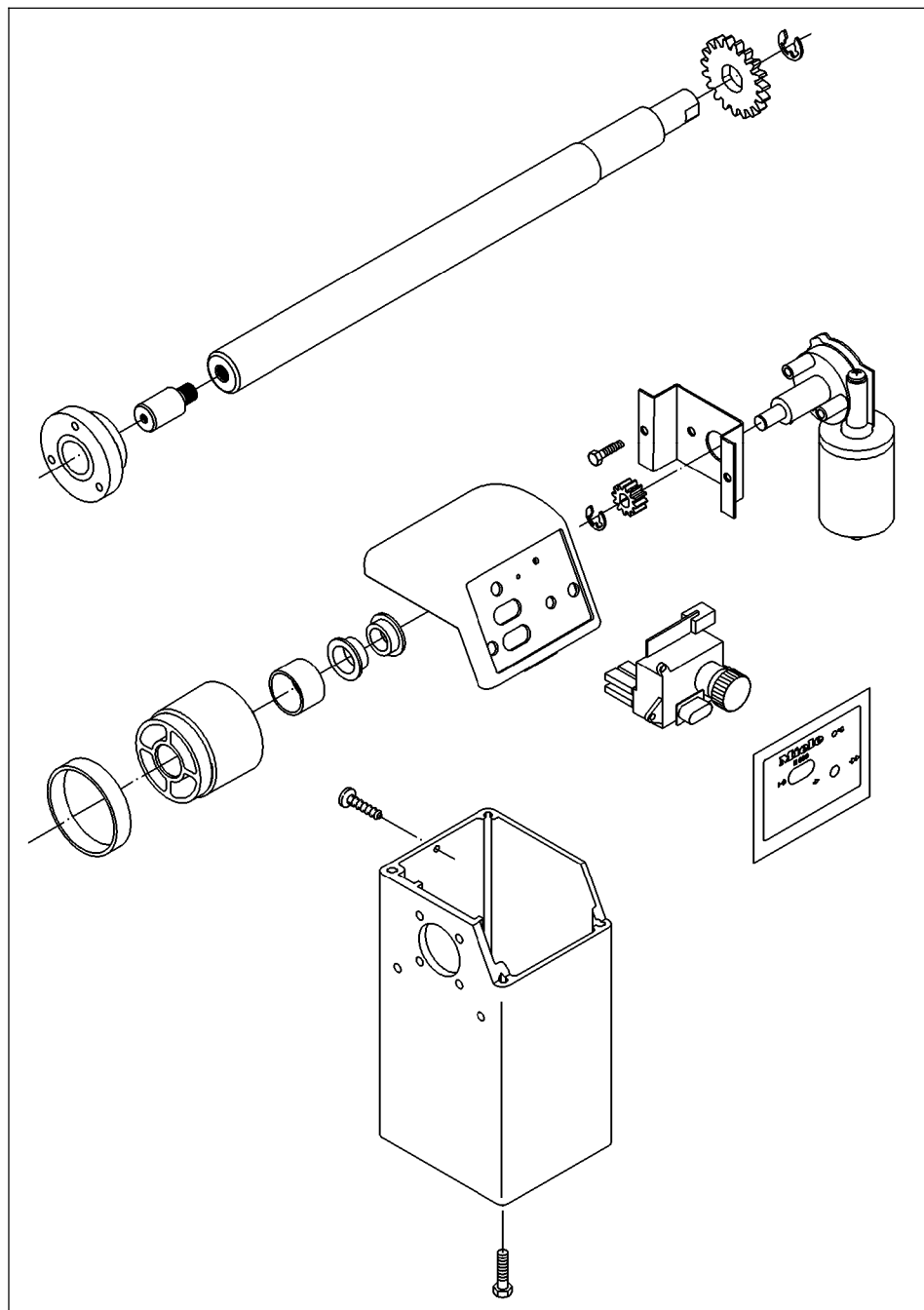
4.2 Ironing Cloth Replacement

See the operating instructions.

Note:

When changing the ironing cloth, the roller must be cold.

050 Roller Motor



Technical Information**2 Function****2.1 Roller Drive/Motor**

A single drive shaft is connected to the roller via a free-wheel bearing which permits the roller to turn in one direction only. The drive shaft is mechanically connected to the drive motor (M17). Power to the motor (24VDC) is controlled by the user's actions via the foot plate (refer to Section 010-2.3). Speed control is via a 5-stage switch.

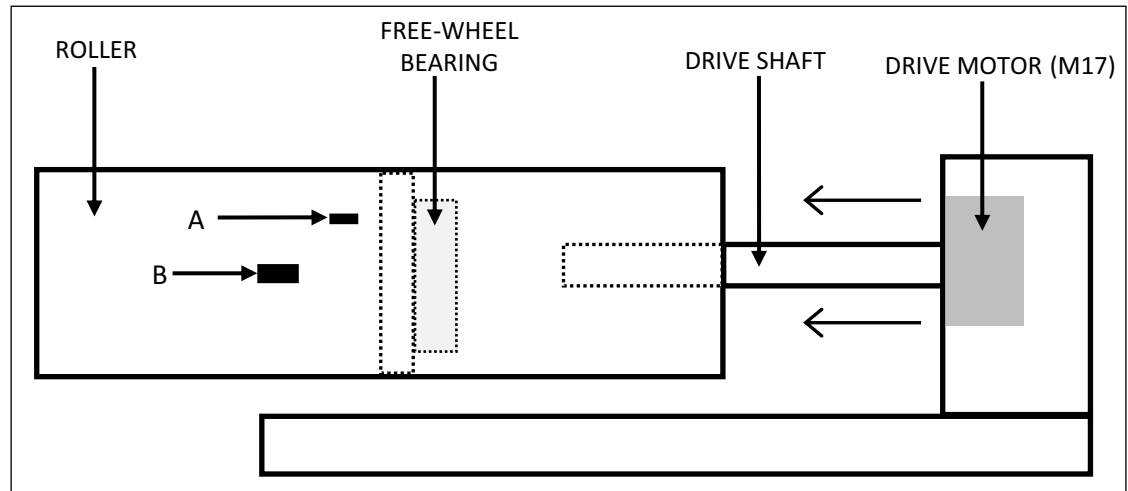


Figure 050-1: Roller and Drive Components

- A Free-wheel retainer screws (3)
- B Roller retaining screw (1)

2.2 Control Electronic

The B 890 and B 990 are equipped with two (2) separate electronic board assemblies: the main electronic (N2), illustrated in Section 010-2.1, and the control electronic (A1). The control electronic is attached to the inside of the top cover, and houses the user controls. See Figure 050-2.

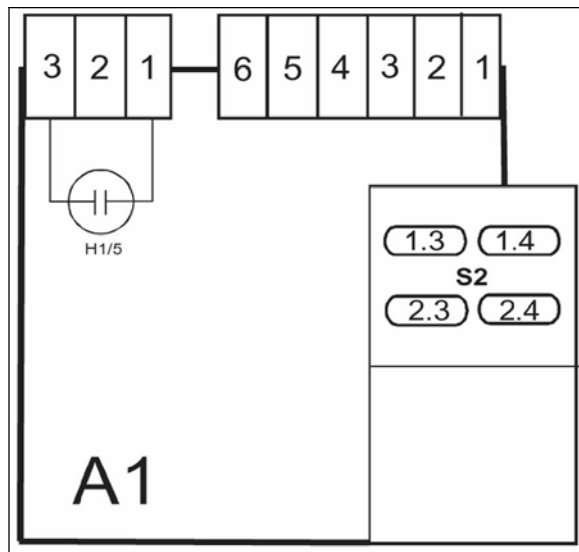


Figure 050-2: Control Electronic A1

3 Fault Repair

3.1 Noisy Operation in the Bearing Flange

Cause:

Lubricant (grease or oil) in the bearing.

Remedy:

1. Remove the bearing flange; see Section 050-4.3.
2. Remove lubricant (grease or oil) from the bearing.

4 Service

4.1 Control Electronic (A1) Removal

Note:

From machine no. 46641397, a new control panel was installed. The old control panel (mat. no. 5056071) must always be replaced with an old version and the new panel (mat. no. 5368000) must be replaced with a new version.

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Lever off the switch knob using a lid opener or yellow Miele tool.
3. Remove the T20 screw from the rear of the control electronic cover.
4. Lift the cover at the rear and unclip it at the front.
5. Disconnect all connections from the control electronic.
6. Remove the cover/electronic assembly.

Technical Information**Note:**

The plug contacts are sometimes not coded. Take care when replacing the control electronic to connect the plugs one by one exactly as they were before. This prevents incorrect connection.

7. Remove the three T20 screws securing the control electronic to the cover.
8. Remove the control electronic.

4.2 Drive Shaft Removal

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Remove the T20 screw from the rear of the control electronic cover.
3. Lift the cover at the rear and unclip it at the front.
4. Remove the cover/electronic assembly.
5. Remove the roller; see Section 040-4.1.
6. Access the interior side of the frame (where cover was just removed).
7. Remove the E-clip from the end of the drive shaft (next to the gear).
8. Remove the shaft from the gear by pulling the shaft away from the appliance.
9. Remove the gear from the appliance.

4.3 Bearing Flange Removal

1. Remove the DC motor; see Section 050-4.4.
2. Remove the flange retaining screw (T30) from the motor bracket.
3. Remove the flange.

Note:

Do not apply lubricant when re-installing.

4.4 DC Motor Removal

1. Tilt the ironing table to its horizontal position; see Section 020-4.1.
2. Remove the T20 screw from the rear of the control electronic cover.
3. Lift the cover at the rear and unclip it at the front.
4. Remove the roller; see Section 040-4.1.
5. Access the interior side of the frame (where cover was just removed).
6. Remove the E-clip from the end of the drive shaft (next to the gear).
7. Remove the shaft from the gear by pulling the shaft away from the appliance.
8. Remove the gear.
9. Remove the 2 T30 screws securing the motor to the frame from outside the frame. See Figure 050-2.

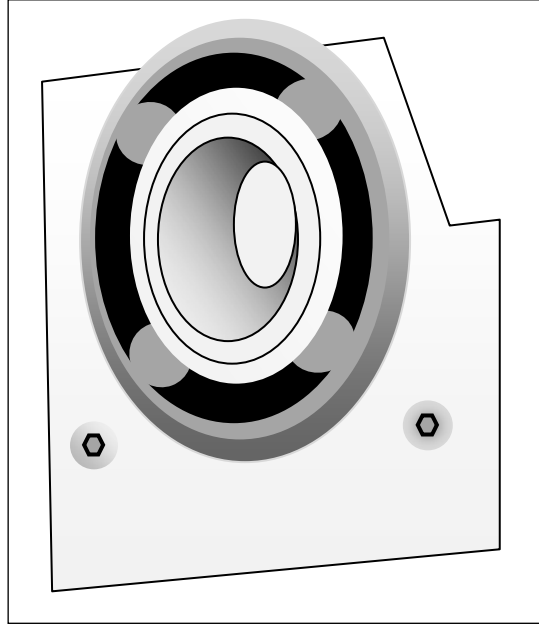


Figure 050-2: Screws Securing Roller Drive Motor to Frame

10. Remove the motor partially by lifting it upward.
11. Disconnect the wiring harness from the motor.
12. Lift the motor completely out of the frame.