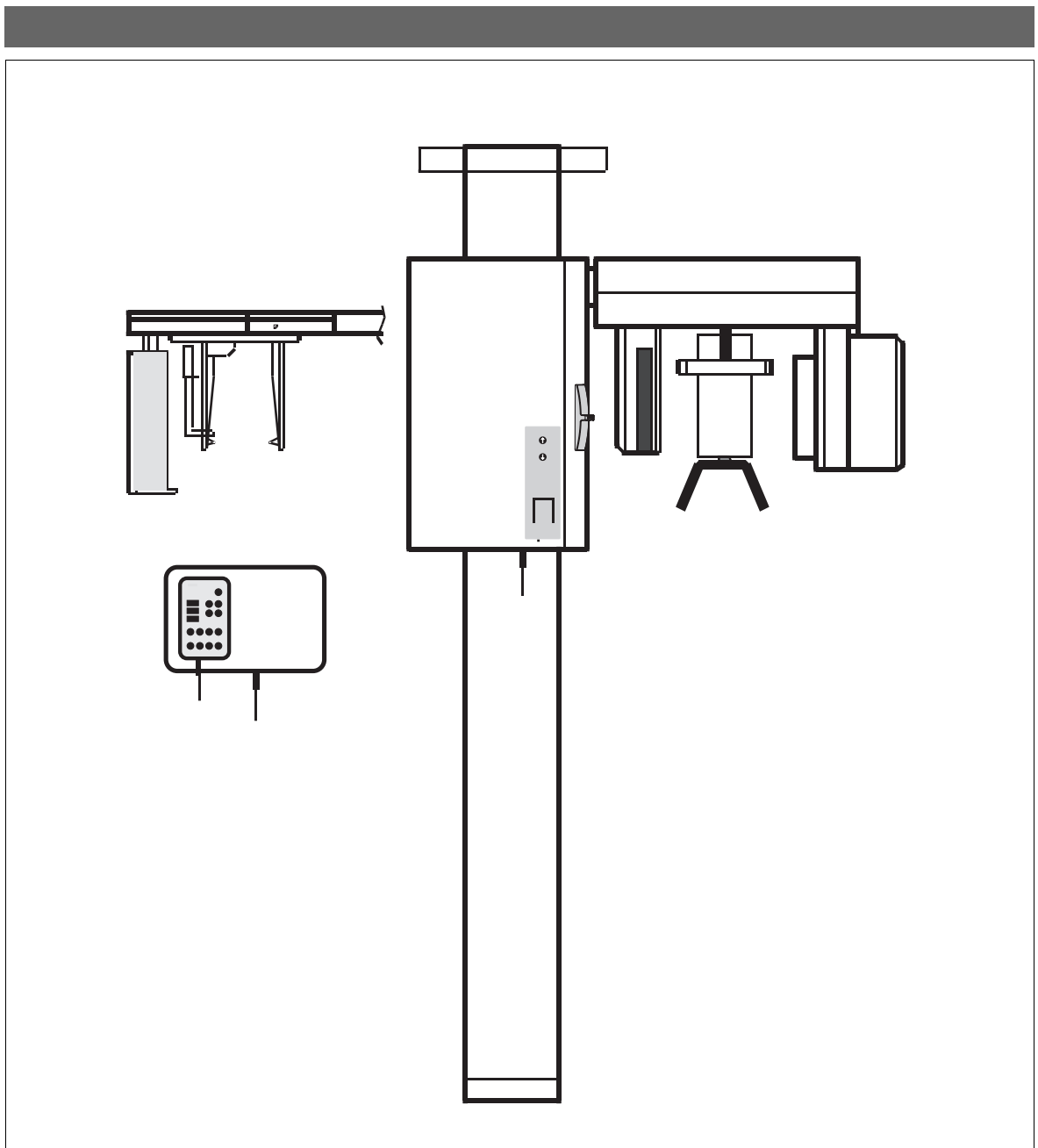


ORTHOPHOS 3 / 3 Ceph

Maintenance Instructions



ATTENTION !

**Proper shielding of room and operator position is essential.
Since these requirements vary from state to state it is
the assembler's/installer's responsibility that all local radiation safety
requirements are met.**

General

To stay in compliance with the DHHS requirements the ORTHOPHOS[®]3 / 3 Ceph must be maintained annually following date of installation.

It is the responsibility of the user to insure that the equipment is maintained with the manufacturer's recommended **Maintenance Instructions** to insure compliance with the Federal Performance Standard. The manufacturer and the assembler/installer are relieved from responsibility in those cases where noncompliance with the standard results from the user's failure to have the manufacturer's recommended maintenance performed.

The actual maintenance inspection and consequent service must be accomplished by a trained serviceman. Neither the inspection nor service is part of the equipment warranty.

Technical instructions required

Operating Instructions

Service Manual

Instruments and adjustment tools required

1. Digital multimeter Philips PM 2816 rms, Fluke 8000 A, or equivalent.
Accuracy: DC voltage $\pm 0.1\%$ of reading plus 0.02% of range
DC current $\pm 0.4\%$ of reading plus 0.1% of range
2. Electromechanical pulse counter,
model KESSLER ELLIS KT 203 ± 1 pulse, or equivalent.
3. Needle phantom, adjusting film for tele-exposure (delivered with the unit, customer's property)
Alignment tool for X-ray beam, order no 89 31 800 (not delivered with the unit).

CAUTION RADIATION

Observe radiation protection guidelines as outlined in the Operating Instructions!
X-rays are generated, when the exposure button at the Multitimer is depressed.

Caution serviceman!

All **PC-boards** are fitted with electronic components sensitive to electrostatic discharge (ESD). Electrostatic charges are unavoidable due to friction of clothing, carpeting etc.

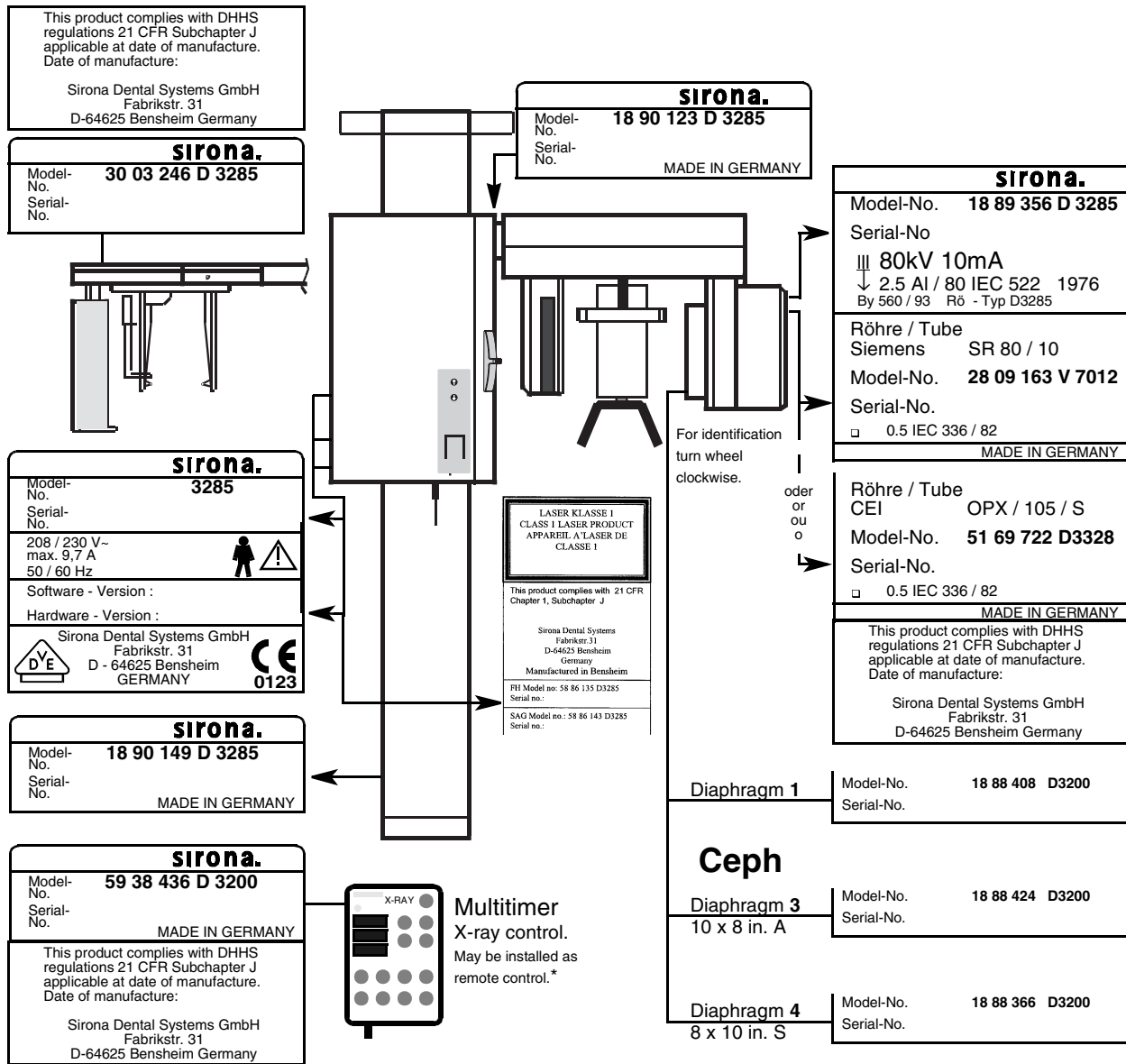
To prevent damage of electronic components do not touch same without putting on the unit mounted special wristlet.

Always handle circuit boards by the edge of same.



List of Contents

| | Page |
|---|----------|
| General | 3 |
| Visual Check | 4 |
| Light Indicators and Audible Sound | 5 – 6 |
| Power Supply Adequacy | 7 |
| kV-Verification | 8 – 9 |
| Tube Current Verification | 10 |
| Exposure Time Verification | 11 – 13 |
| Checking and Adjusting the X-Ray Beam for Panorama Exposure | 14 – 16 |
| Phantom Radiograph | 17 |
| Checking the Ear Olives | 18 |
| Checking the X-Ray Beam for Tele-Exposure | 19 |
| Checking the Laser Light Beam | 20 |
| Yearly Maintenance Checklist | appendix |



Visual Check

- Look for mechanical damage possibly affecting radiation safety.
- Verify that all labels are affixed and legible.

Defaced labels must be replaced.

Order same from Sirona (address, see rear)

in writing stating:

Customer Name

Customer Address

All Model Numbers with Serial Numbers

still legible on the unit for identification purposes.

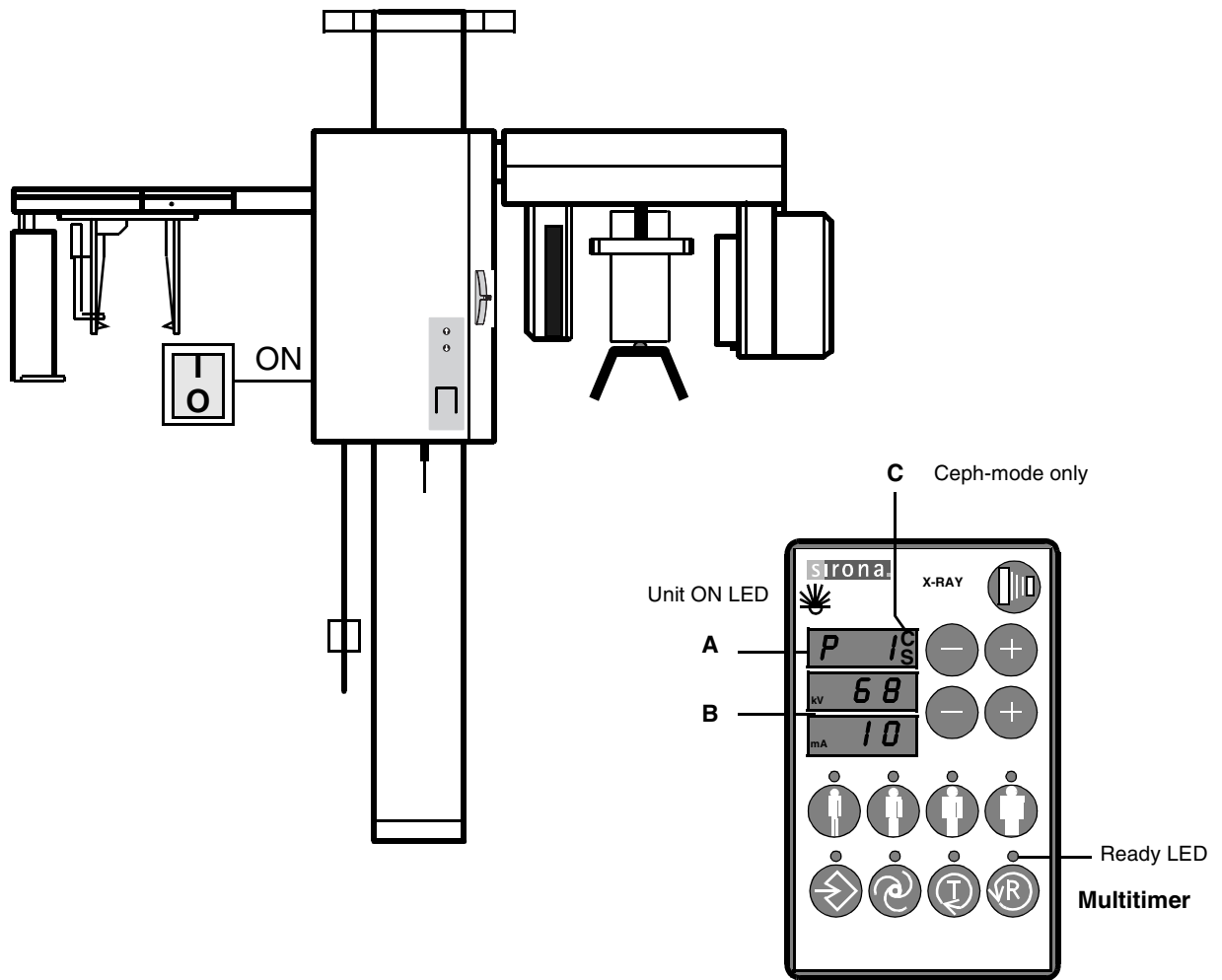
For serial numbers see also **Warranty Passport**.

* REMARK for the following checks

If the Multitimer is installed as remote control outside the X-ray room:

Attach the Multitimer temporarily to the unit.

For this purpose remove plastic front cover of the unit's carriage and the lower shielding, covering the plug.



Light Indicators at the Multitimer, Audible Sound at the Unit.

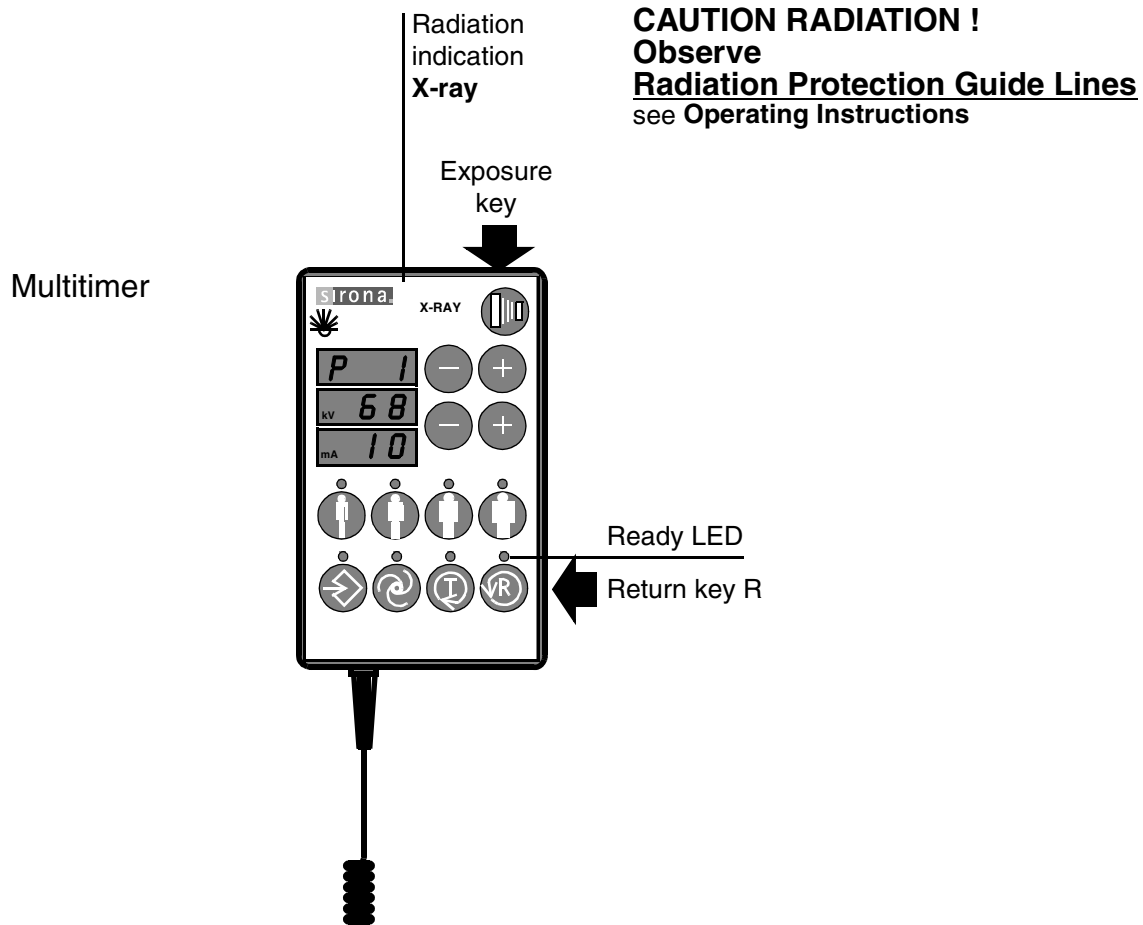
- Unit ON LED:**
 Depress the main switch into the "I" position to turn unit ON.
 The unit adjusts itself automatically, wait about 1 minute.
 The "Unit ON LED" in the upper left corner of the Multitimer will then indicate that the unit is ON.
- Digital displays at the Multitimer:**
 The program and exposure parameters employed with the last patient appear.

A shows you sequentially the **P1**, **P6** and **P11** exposure programs (with the diaphragm 1 set) and the respective maximum exposure time. Press **- +** program keys for correct display check.
 With diaphragms 3 and 4 the exposure times for tele-exposure light up.

B gives you the kV/mA matched value pair. The LED over the respective patient symbol must light up.
LED over the return key **R** must blink. (When LED blinks, unit is **not** ready for the exposure).
C lights up, when Ceph-mode is selected (see ORTHOPHOS 3C Operating Instructions for Tele-Exposures).

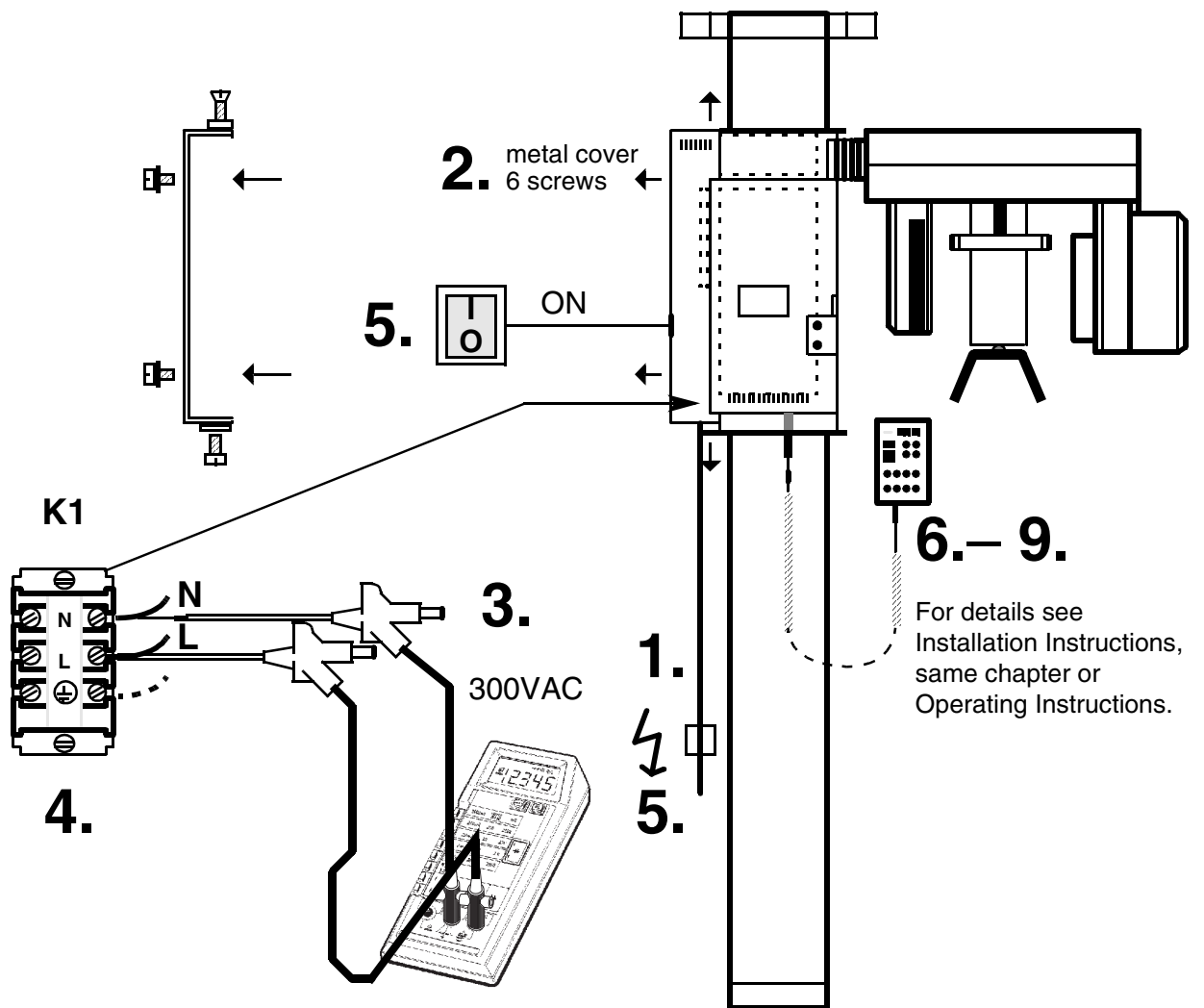
See also Operating Instructions under "Preparing the Exposure" subchapter "Switching ON the Unit".

continues



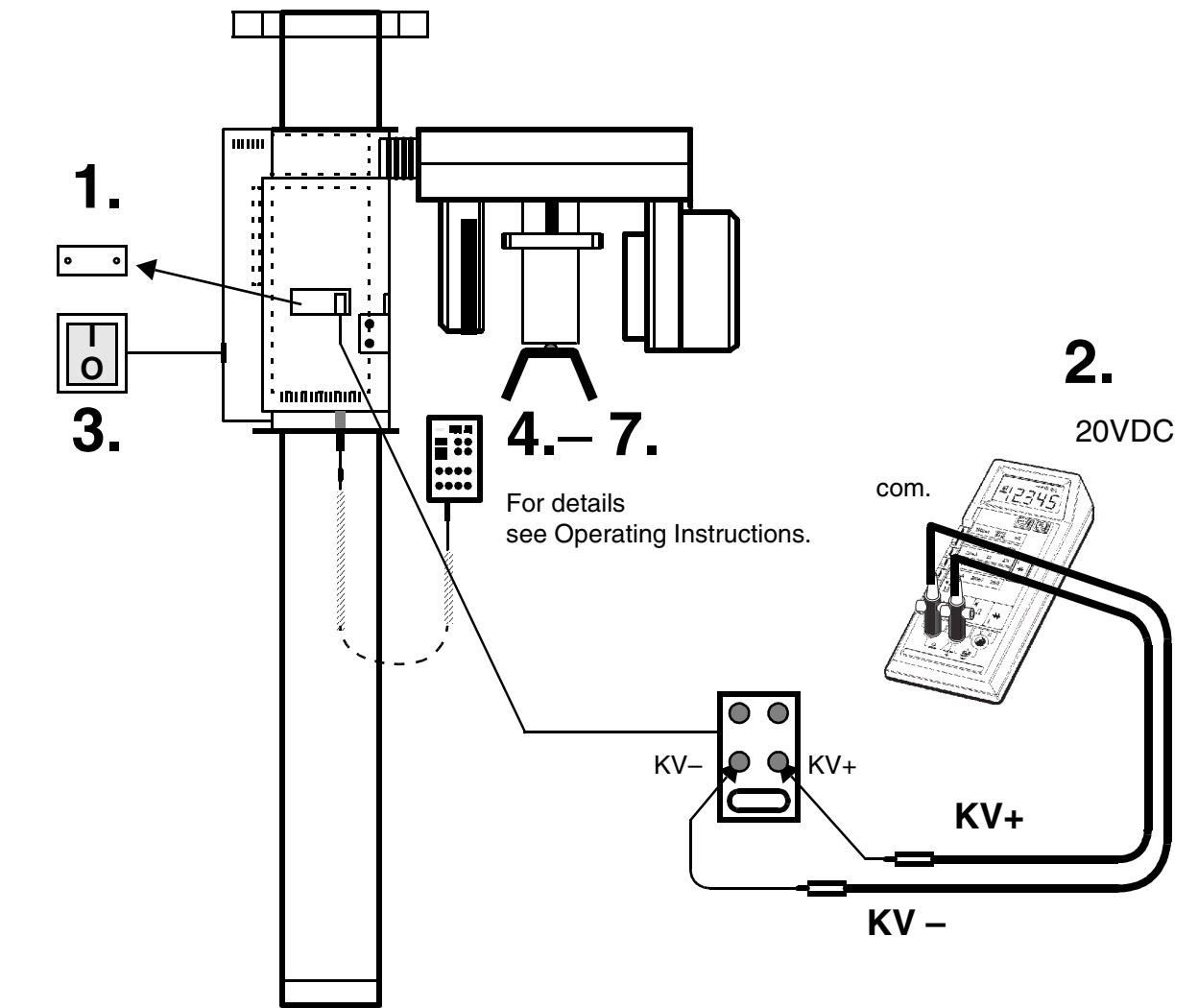
CAUTION RADIATION !
Observe
Radiation Protection Guide Lines
 see **Operating Instructions**

- **Make a panorama exposure:** (diaphragm 1 is set at the diaphragm wheel)
 - X-ray head must be in the initial position (If not, press return key R).
 - Insert a panorama film cassette into the carriage and swing in the cassette holder. The LED over **R** key must go out. For more details and possible error messages see Operating Instructions.
 - Set the **P1** exposure program using the upper **- +** keys.
 - Select **68kV/10mA** using the lower **- +** keys.
 - **CAUTION RADIATION.** Depress the exposure key and **hold until the exposure terminates automatically.**
 The exposure ends when the LED over R key blinks and rotation and radiation automatically switch off. The radiation indication **X-ray must light up** during the exposure period. Simultaneously an **audible beep must sound** at the unit.
- **Interrupt an exposure – deadman feature:**
 - Observe a cool-off time of 5 mins. between exposures (automatic exposure blockage).
 - Setting same as above. Remove and reinsert the film cassette. The LED over **R** key must go out.
 - **CAUTION RADIATION.** Depress the exposure key **until X-ray lights up** and **subsequently release – the exposure must terminate immediately.** The LED over R key blinks.
- **Defective light indicators** constitute a safety hazard to the patient as well as to the operator.
The user is not permitted to use the unit, until repairs are made!



Power Supply Adequacy

- To determine power supply adequacy, the **line voltage drop** during exposure must be measured.
- Be sure power is disconnected at the central distribution panel!
 - Remove front plastic cover (for details see Service Manual). Remove lateral metal cover (6 screws).
 - Select 300VAC line voltage range on multimeter.
 - Connect measuring leads to terminal **K1**, **L** and **N**.
 - Connect power and switch unit ON. Wait 1 min. for self-adjustment of the unit.
 - Press key **R** at the Multitimer to return X-ray tube head into the initial position.
 - Remove and reinsert the film cassette. The LED over R key at the Multitimer must now go out.
 - Select **P1** program and **80kV/10mA** at the Multitimer.
 - CAUTION RADIATION!** - Depress the exposure key at the Multitimer until meter reading is obtained.
- | | | | |
|-------------------------------|------------|--|------|
| Line voltage, no load: | 187 – 208V | Max. permissible line voltage drop: | 9V |
| | 208 – 230V | | 8V |
| | 230 – 240V | | 7.5V |
| | 240 – 264V | | 7V |
- **Record reading.** Turn unit OFF. Remove meter leads and refit lateral metal cover.
 - If the voltage drop is not within the specified range** advise the customer, that an adequate power supply must be installed. Refer to Pre-Installation Instructions.



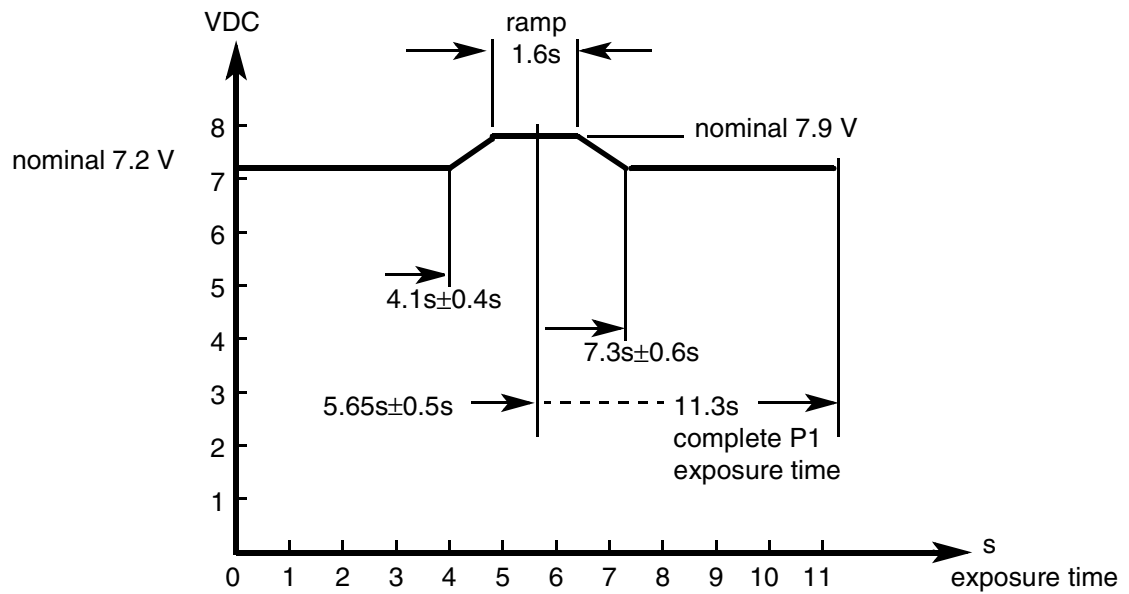
kV – Verification, kV–ramp during panoramic exposure

- During exposure the kV is increased in the central region depending on kV/mA selected up to 12%. This increase can be measured in VDC.
1. Remove metal cover (2 screws).
 2. Connect digital voltmeter to KV+ and KV– and select range 20 VDC.
 3. Switch unit ON. Wait 1 min. for self-adjustment of the unit.
 4. Press return **R** key to return the X-ray head into the initial position.
 5. Remove and reinsert the film cassette.
 6. Select **P1** program and **72kV/10mA** at the Multitimer. LED above R key on Multitimer must be off.
 7. **CAUTION RADIATION!** - Depress the exposure button until the exposure terminates automatically.

The following values must be obtained – see also diagram on next page.

| | |
|--------------------|---------------------|
| up to 4.1 seconds: | 7.2 V ±0.5V, |
| from 4.9 to 6.5 s: | 7.9 V ±0.5V, |
| after 7.3 seconds: | 7.2 V ±0.5V. |

- Turn unit OFF and remove meter leads.
- **If specified values cannot be obtained**, see Service Manual, "Radiograph Density in Central Region Incorrect"

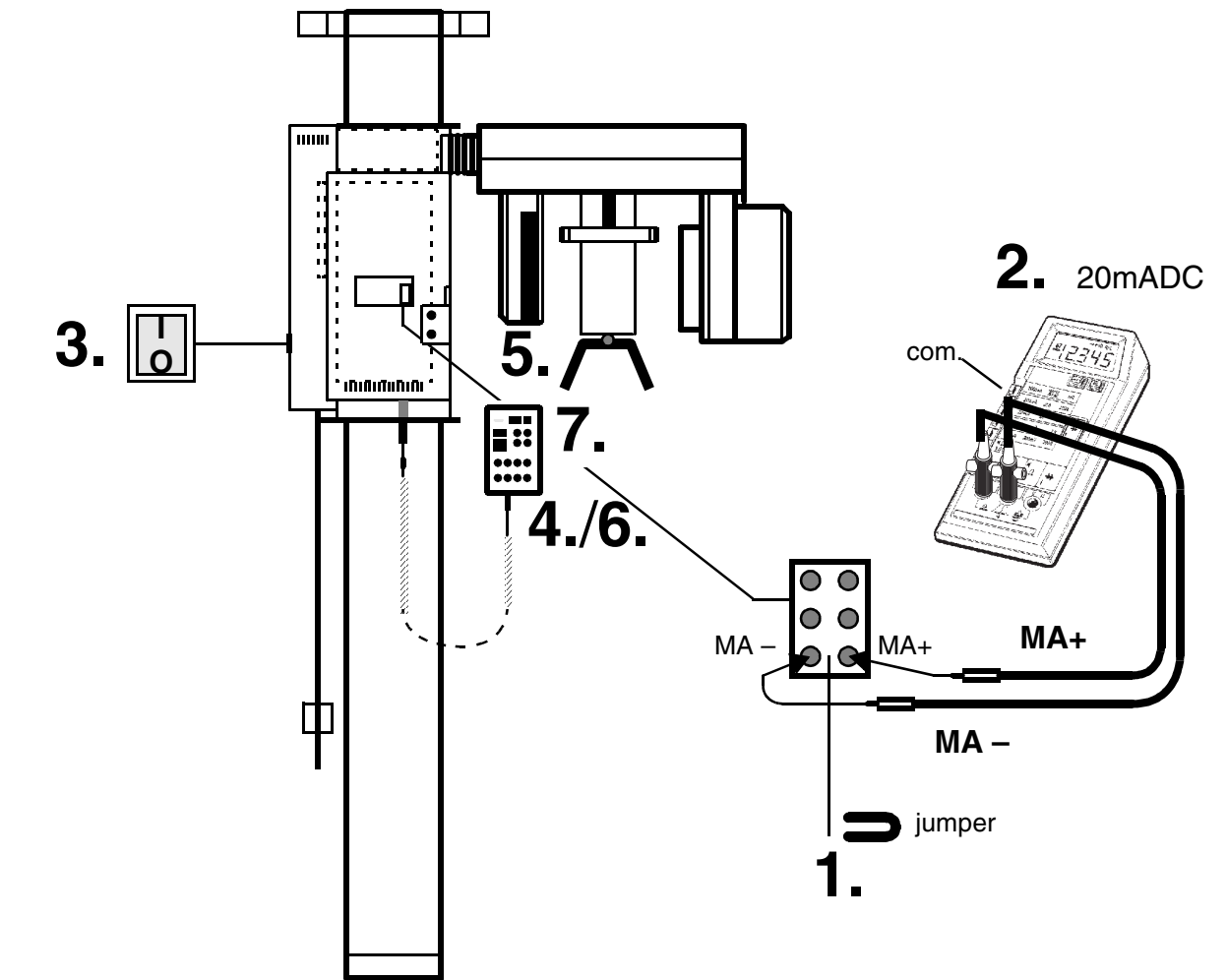


kV – ramp diagram

with program P1 and 72kV/10mA set on the Multitimer.

ATTENTION

The kV - ramp can be changed at the customer's request.

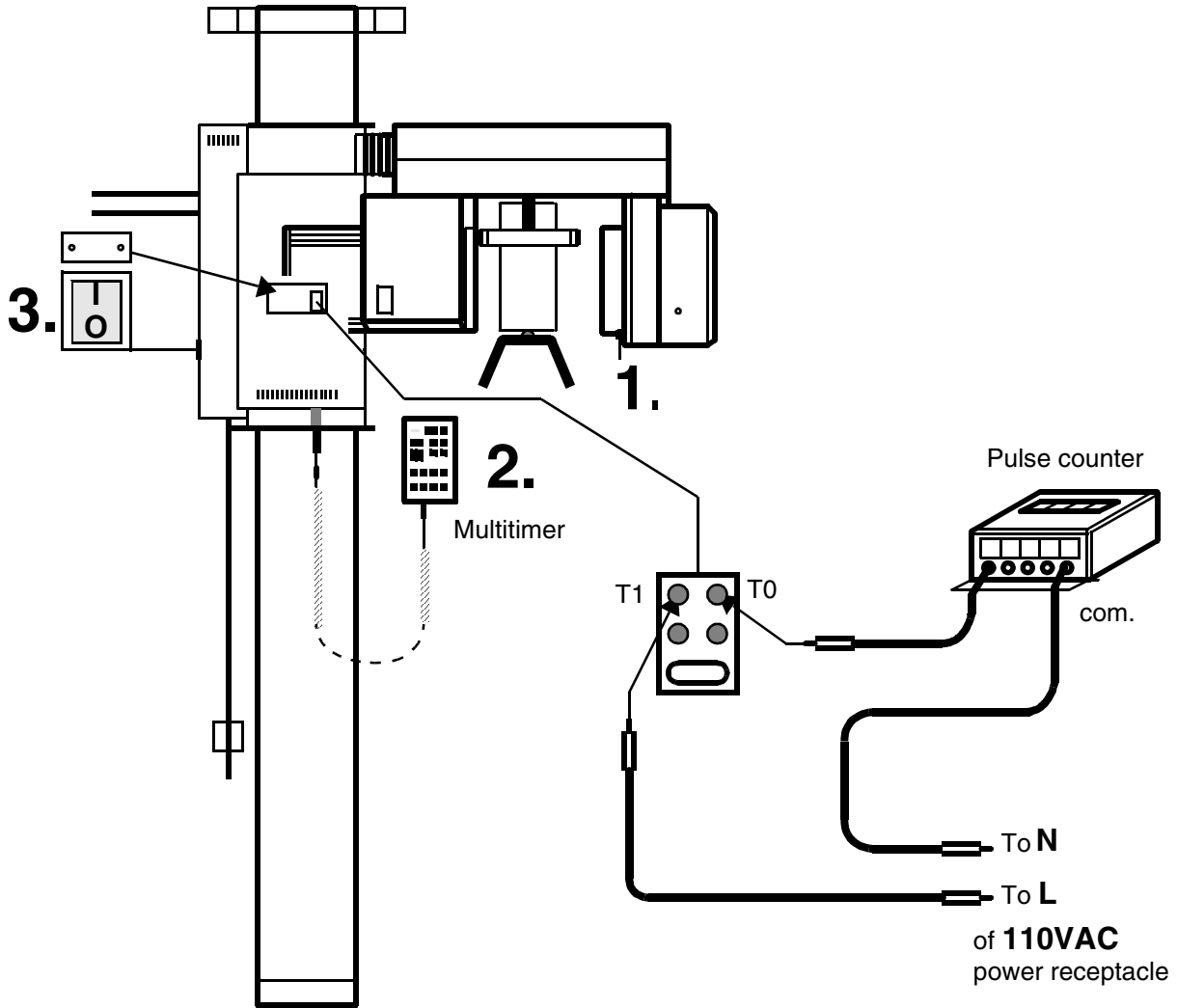


Tube Current Verification

1. Remove jumper from MA+/MA – test points on PC-board DX1.
2. Connect digital ammeter to MA+ and MA– and select range 20 mADC.
3. Switch unit ON and wait 1 min. for self-adjustment of the unit.
4. Press return key **R** to return the X-ray head into the initial position.
5. Remove and reinsert the film cassette.
6. Select **P1** program and **72kV/10mA** at the Multitimer. The LED above R key on Multitimer must be off.
- **Measurement:**
7. **CAUTION RADIATION!** Depress the exposure key and hold depressed until meter reading is obtained.

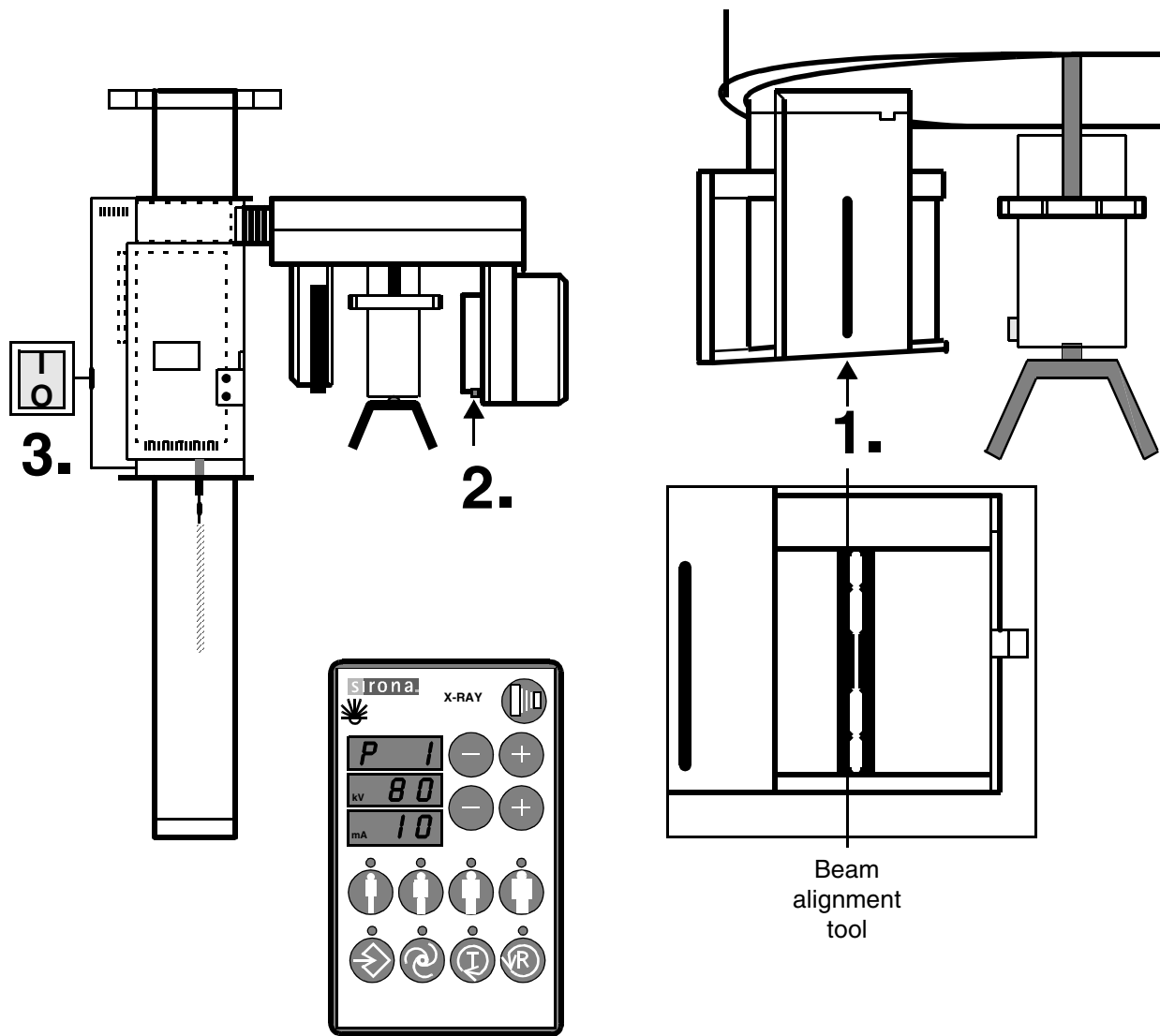
The ammeter shall indicate 10mA ±0.5mA. - - Record reading.

- If specified value is obtained switch unit OFF. - Remove meter leads and replace jumper!
- **If specified values cannot be obtained**, see Service Manual, chapter "Tube Current Verification".



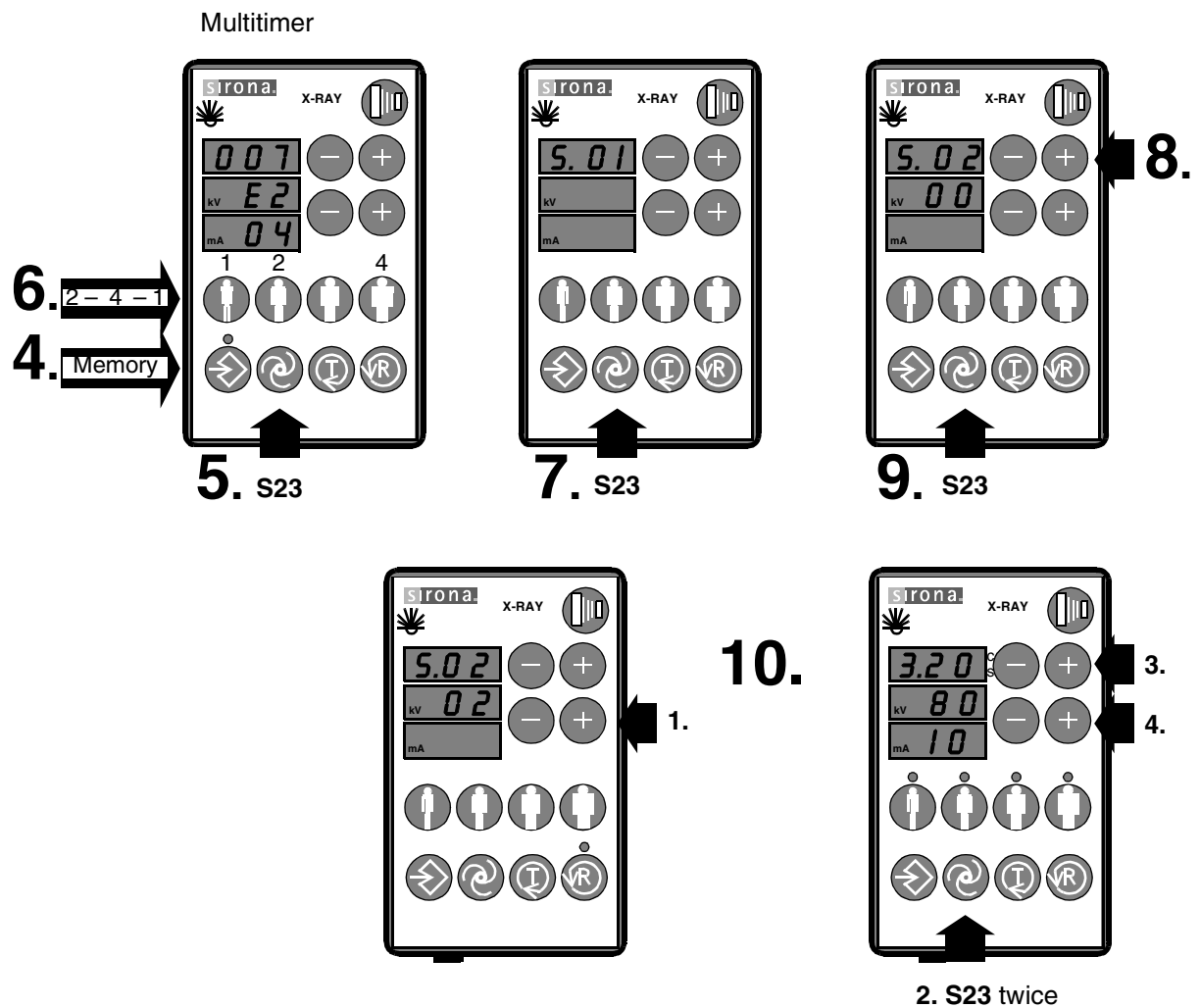
Exposure Time Verification for Tele – Exposure

- The pulse counter is still connected as described on previous page.
- 1. Prepare unit for tele-exposure:
 - Adjust **diaphragm 3** for tele-exposure on the diaphragm wheel.
 - Swing panorama cassette holder out of x-rax path.
 - Press **R** key to move x-ray head into position for tele-exposure.
 - For details see Operating Instructions for Tele-Exposures, chapter "Preparing the Tele-Exposure".
- 2.1 At the Multitimer select **72kV/10mA** and **1.0** second.
 - **Make four exposures CAUTION RADIATION !**
 - Depress the exposure key and hold depressed until the exposure terminates automatically.
 - Record pulse count and reset pulse counter after each exposure.
 - 1. exposure pulses Allow a 5 mins. cool-off time between exposures!
 - 2. exposure pulses (automatic exposure blocage)
 - 3. exposure pulses
 - 4. exposure pulses
 - total pulses, divided by 4= _____ average pulse count.
 - - **Record average pulse count.**
 - At 60Hz:** nominal 1.0 sec. = 60 pulses±2 **at 50Hz:** nominal 1.0 sec. = 50 pulses±2
- 2.2 At the Multitimer select **72kV/10mA** and **2.0** seconds.
 - **Make four more exposures CAUTION RADIATION !**
 - Depress the exposure key and hold depressed until the exposure terminates automatically.
 - Record pulse count and reset pulse counter after each exposure.
 - 1. exposurepulses Allow a 5 mins. cool-off time between exposures!
 - 2. exposurepulses (automatic exposure blocage)
 - 3. exposurepulses
 - 4. exposurepulses
 - totalpulses, divided by 4= _____ average pulse count.
 - - **Record average pulse count.**
 - At 60Hz:** nominal 2.0 sec.=120 pulses±2 **at 50Hz:** nominal 2 sec.=100 pulses±2
- 3. **If specified values are obtained**, switch unit OFF.
Remove meter leads and refit small metal cover (2 screws).
- **If specified values cannot be obtained**, see Service Manual, chapter "Exposure Time Verification".

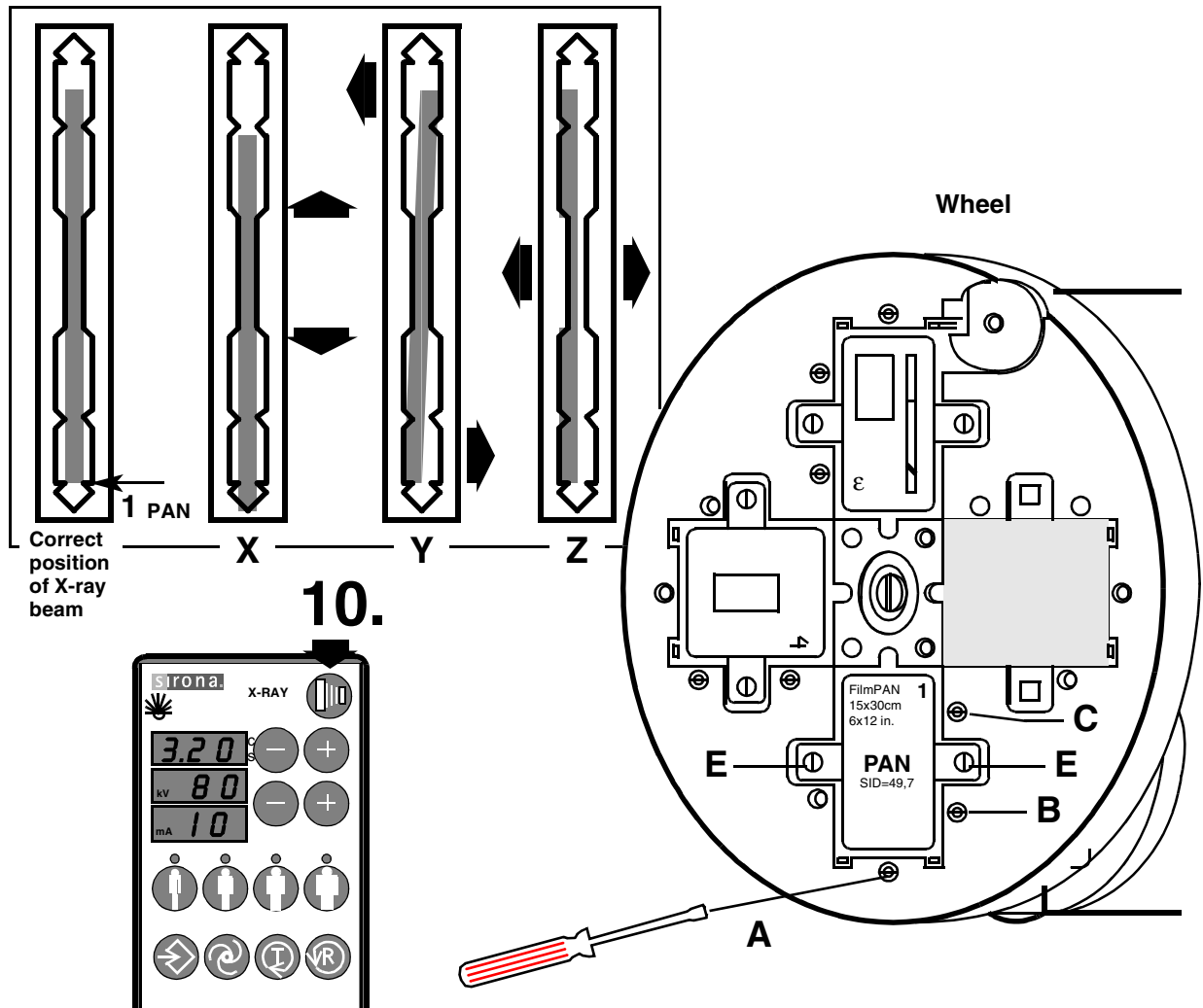


Checking and Adjusting the X-Ray Beam

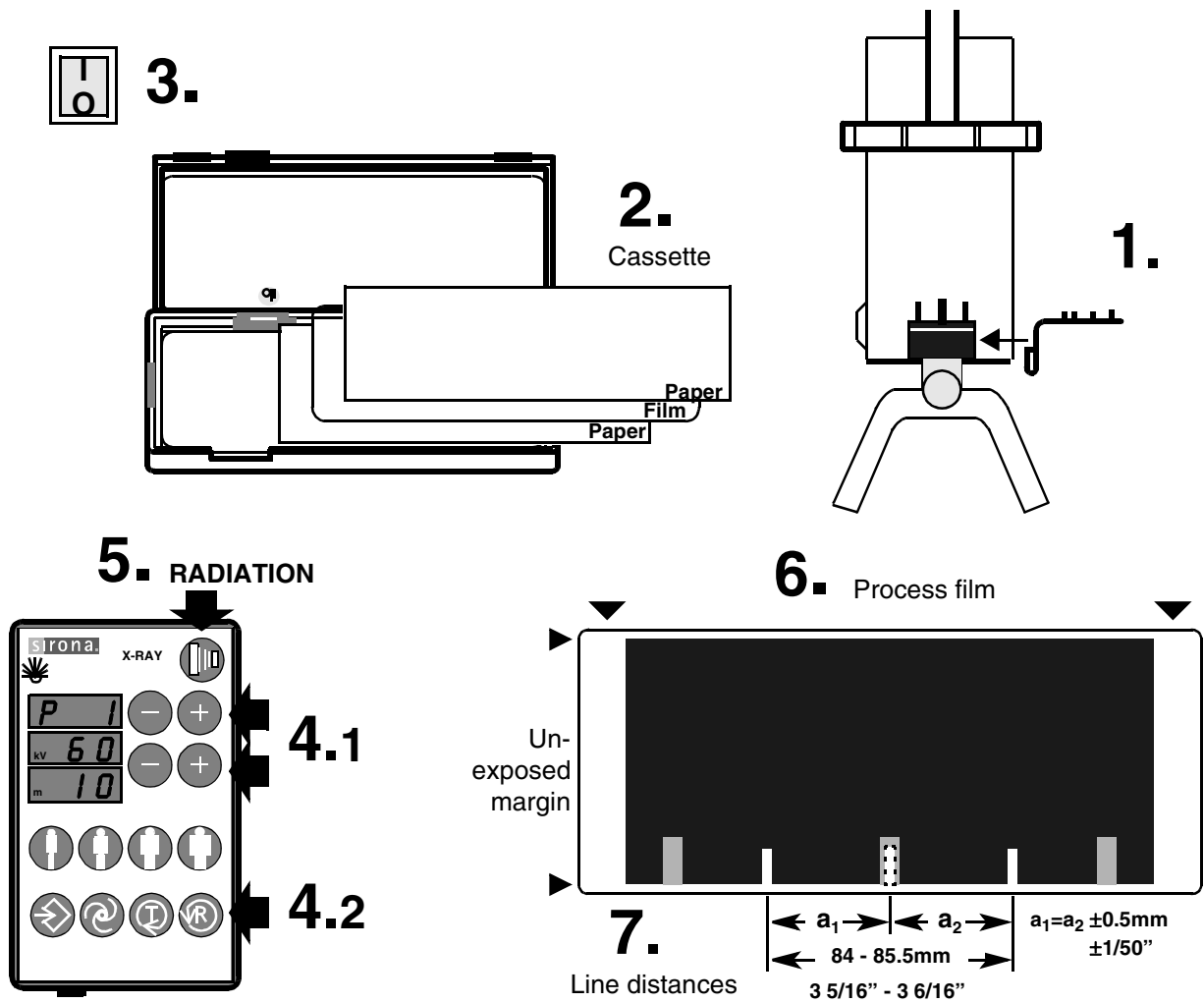
1. Place beam alignment tool vertically in the cassette carriage and move behind the slit cover plate.
 2. Set the **diaphragm 1** on the wheel.
To move the wheel, press button D. X-radiation will only be activated when button D is engaged.
 3. Turn unit ON and wait 1 min. for self-adjustment of the unit.
- Thereafter select Service - Routine **S.02** at the Multimer. See next page.



- Select service routine S.02 at the Multitimer (X-ray head and cassette carriage remain stationary):
- 4. Press **Memory** key.
- 5. Press **service key S23** until (approx. 4s) the digital displays disappear.
- 6. **Within 3s** press patient symbol keys in the sequence 2 – 4 – 1.
 - Service mode is now selected.
- If the sequence is not observed when selecting the service routine, if a wrong key is pressed or the time is exceeded, the system switches automatically to normal mode.
- 7. Press **service key S23**.
 - Service routine **S.0 I** appears on the digital display.
- 8. Press **+ key** to select service routine **S.02**.
- 9. Press **service key S23**.
 - On the kV display appears **00**.
- 10. 1. Press **+ key** to select service code **02**.
 - 2. Press service **key S23** twice (kV/mA blinking)
 - 3. Select exposure time **3.20s**.
 - 4. Select **80kV**.

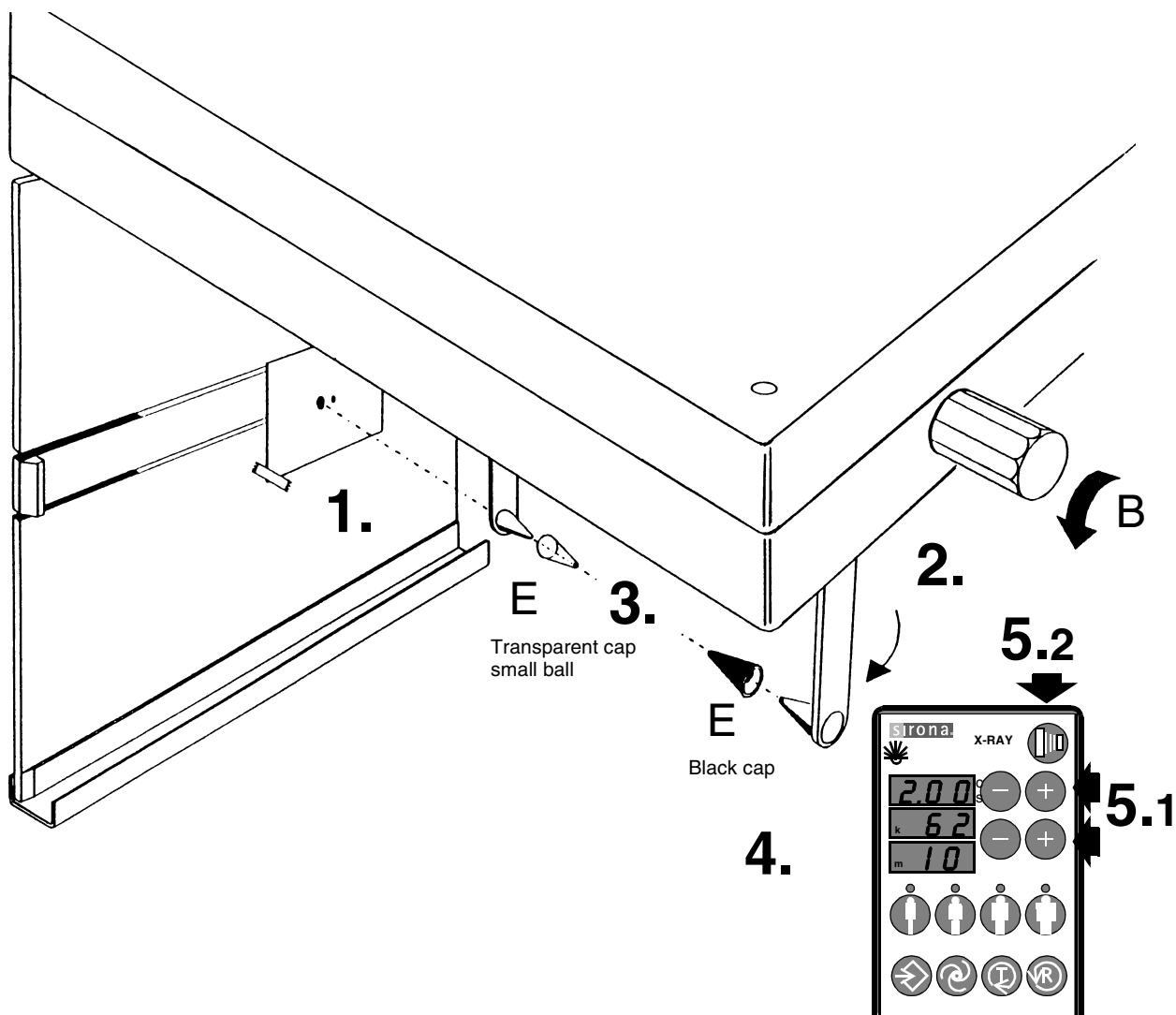


- Darken the room.
 - 10. Activate X-radiation to check correct position of X-ray beam. CAUTION RADIATION!**
 - **If X-ray beam is not in correct position** adjust the X-ray beam position to the corresponding mark 1 of the alignment tool.
To do this, remove wheel cover of X-ray head (see Service Manual).
 - **Activate X-radiation. CAUTION RADIATION!**
Activate X-radiation only for as long as you need to recognize the X-ray beam position.
 - X Beam correction 'HIGH – LOW':** Loosen 2 screws **E** by 1 turn. Set beam via screw **A**.
Retighten screws **E**.
 - Y Beam correction 'VERTICAL':** Loosen 2 screws **E**. Set beam via screws **B** and **C**.
Retighten screws **E**.
 - Z Beam correction 'RIGHT – LEFT':** Loosen 2 screws **E**. Set beam via screws **B** and **C**.
Retighten screws **E**.
 - Remove beam alignment tool and switch unit OFF.
- NOTE: Final check of X-ray beam position under "Phantom Radiograph".



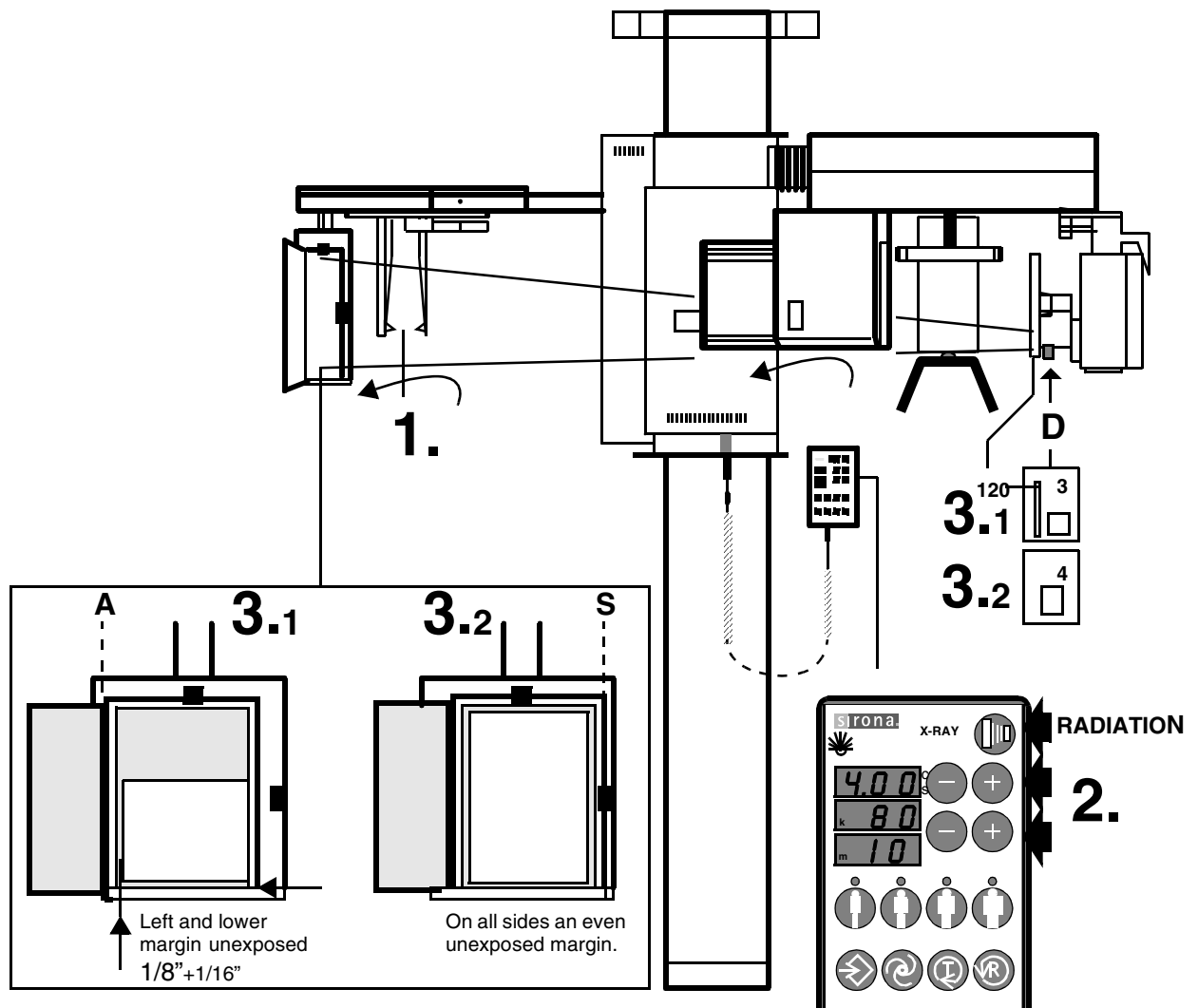
Phantom Radiograph

- Diaphragm 1 is still adjusted at the diaphragm wheel.
 - 1. Fit the needle phantom up to stop.
 - 2. Cut out two paper strips as large as the film size.
Place the film between the paper strips **in the dark room** – making sure film and paper strips are level with the bottom of the cassette! (The paper strips are needed to neutralize the intensifying screens). Attach film cassette to the unit's cassette holder (For details see Operating Instructions).
 - 3. Switch unit ON and wait 1 min. for self-adjustment of the unit.
 - 4. Select **P1** and **lowest kV**. Press return key **R**, the X-ray head moves into start position!
 - 5. **CAUTION RADIATION!** Initiate the exposure for a **complete rotating cycle**. 84 - 85.5mm
3 5/16" - 3 6/16"
 - 6. Process the film.
 - 7. Check the film: Measure the **line distances** on the film as shown.
- **If the distances exceed the above tolerances**, actuator M2 must be adjusted – see Service Manual.



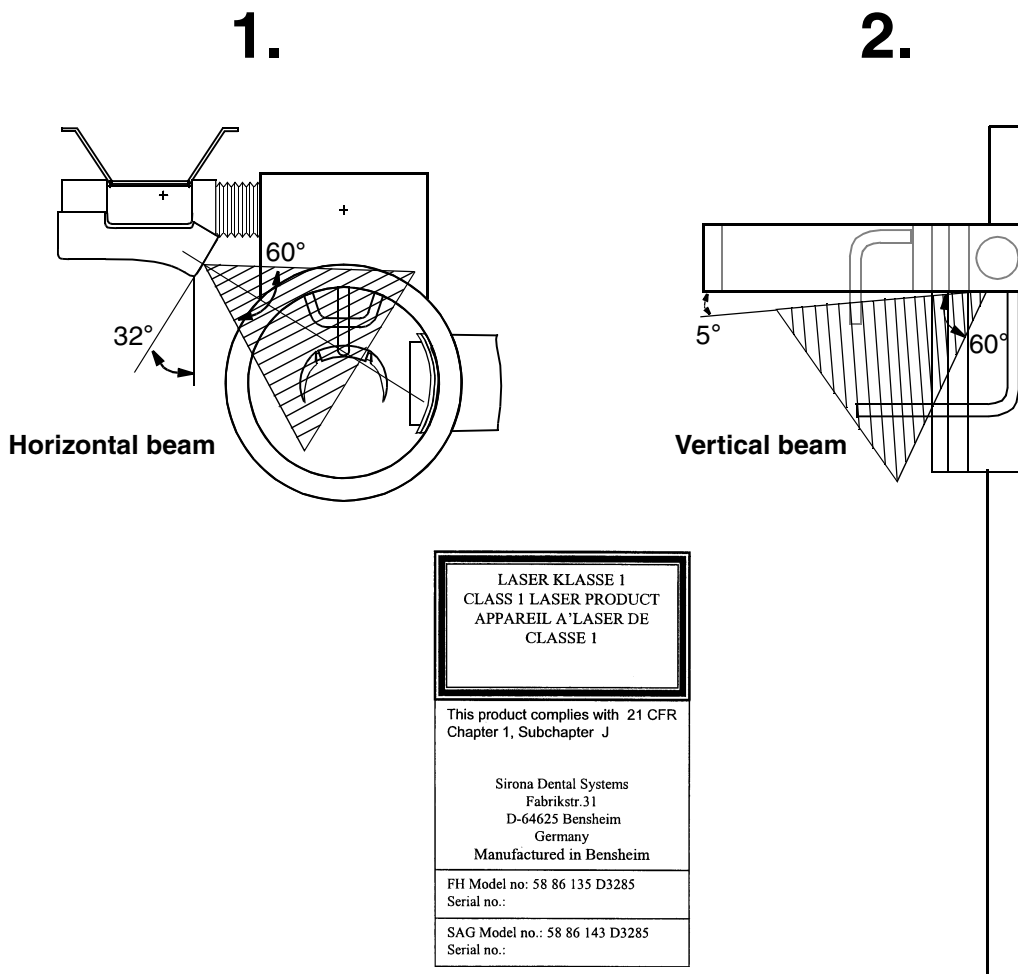
Checking the Ear Olives

- Metal balls in the adjustment caps show up as dots on an exposed film. **Both dots must coincide.**
- 1. Attach an intraoral film with adhesive tape to the cassette holder.
- 2. Turn button B counter clockwise and position ear olives in X-ray path.
- 3. Pull out ear olive holders to maximum distance and place adjusting caps **E** on ear olives.
- 4. Prepare unit for tele-exposure (diaphragm 4). For details see ORTHOPHOS 3C Operating Instructions manual, chapter "Preparing the Tele-Exposure", steps 1. – 4.
- 5. Select **62kV/2.00s** on the Multitimer and release the exposure. **CAUTION RADIATION!**
- Develop film and **evaluate the position of the dots.**
- **If the dots do not coincide** see Mounting Instructions, chapter 'Checking and Adjusting the Ear Olives' for correction.



Checking the X-Ray Beam Position for Tele – Exposure

1. Move the ear olive holder out of the X-ray beam path.
The cassette holder for panorama exposure is still out of the X-ray beam path .
2. Select 80kV/4.00s at the Multitimer.
 - 3.1 **Check A = ASYMMETRICAL** with diaphragm 3.
Set **diaphragm 3** on wheel (press button D and turn wheel). Set soft-tissue filter to position 120.
Insert opened cassette vertically up to the **lefthand** stop.
 Activate **X-RADIATION** — **only for as long as you need to recognize the beam position.**
 - **If the X-ray beam is not in the correct position,**
see Mounting Instructions, chapter '**Adjusting the X-Ray Beam** for Tele – Exposure' for correction.
 - 3.2 **Check S = SYMMETRICAL** with diaphragm 4.
Set **diaphragm 4** on wheel.
Insert opened cassette vertically up to the **righthand** stop.
 Activate **X-RADIATION** to recognize the beam position.
 - **If the X-ray beam is not in the correct position,**
see Mounting Instructions, chapter '**Adjusting the X-Ray Beam** for Tele – Exposure' for correction.
- Finally reattach covers.



Checking the Laser Light Beam

- Pressing the height adjustment button \uparrow always automatically switches on the laser light localizers for one minute.
 - Radiation of class 1 appears during tests.
Keep always a minimum distance between eyes and laser of 100mm.
 - No stray radiation shall be emitted by defective optics or covers.
The laser must generate a line.
 - No controls are available to adjust the level of laser radiation.
1. Horizontal laser light beam FH.
The light beam must meet the FH line of a sheet of paper which is fixed in the head support. It must be moveable in the vertical direction by moving the laser module at the cover of ORTHOPHOS 3. Unwanted movement of the FH-light localizer is not permitted.
 2. Vertical laser light beam.
The light beam must meet the center of the head support in a vertical direction.

ORTHOPHOS 3 / 3 Ceph

Yearly Maintenance Checklist

Customer: _____ Address: _____

Dealer: _____ Address: _____

Date of original installation: _____ Date of inspection: _____

Report of Assembly FD 2579 # _____

SCHEDULE

| | Yes | No | Remarks |
|------------------------------|--------------------------|--------------------------|---------|
| All manuals are present | <input type="checkbox"/> | <input type="checkbox"/> | |
| Test instruments as required | <input type="checkbox"/> | <input type="checkbox"/> | |

| | Manufacturer | Model | Accuracy | Last calibrated |
|---------------|--------------|-------|----------|-----------------|
| Voltmeter | | | | |
| mA meter | | | | |
| Pulse counter | | | | |

| | | | |
|---|--------------------------|--------------------------|--|
| Any mechanical damage noticed | <input type="checkbox"/> | <input type="checkbox"/> | |
| All labels are present and legible | <input type="checkbox"/> | <input type="checkbox"/> | |
| All indicator lights are OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Radiation indicator X-ray lights up, audible buzzer OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Deadman feature OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Power supply adequate | <input type="checkbox"/> | <input type="checkbox"/> | Line voltage:V Voltage drop:V |
| kV – Verification is OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Tube current is within specified limits | <input type="checkbox"/> | <input type="checkbox"/> | Measurement: mA |
| Specified exposure time, panoramic (pulses) OK | <input type="checkbox"/> | <input type="checkbox"/> | Pulse count: |
| Specified exposure times, ceph (average pulses) OK | <input type="checkbox"/> | <input type="checkbox"/> | 1. Average pulse count: 2. Average pulse count: |
| X-ray beam position, panoramic OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| X-ray beam position, ceph OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Phantom radiograph, line distances within tolerance | <input type="checkbox"/> | <input type="checkbox"/> | |
| The unit is in compliance with MFG specified tests and safety | <input type="checkbox"/> | <input type="checkbox"/> | |

Technician: _____ Dealer: _____

ORTHOPHOS 3 / 3 Ceph

Yearly Maintenance Checklist

Customer: _____ Address: _____

Dealer: _____ Address: _____

Date of original installation: _____ Date of inspection: _____

Report of Assembly FD 2579 # _____

SCHEDULE

| | Yes | No | Remarks |
|------------------------------|--------------------------|--------------------------|---------|
| All manuals are present | <input type="checkbox"/> | <input type="checkbox"/> | |
| Test instruments as required | <input type="checkbox"/> | <input type="checkbox"/> | |

| | Manufacturer | Model | Accuracy | Last calibrated |
|---------------|--------------|-------|----------|-----------------|
| Voltmeter | | | | |
| mA meter | | | | |
| Pulse counter | | | | |

| | | | |
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| Deadman feature OK | <input type="checkbox"/> | <input type="checkbox"/> | |
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| kV – Verification is OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Tube current is within specified limits | <input type="checkbox"/> | <input type="checkbox"/> | Measurement: mA |
| Specified exposure time, panoramic (pulses) OK | <input type="checkbox"/> | <input type="checkbox"/> | Pulse count: |
| Specified exposure times, ceph (average pulses) OK | <input type="checkbox"/> | <input type="checkbox"/> | 1. Average pulse count: 2. Average pulse count: |
| X-ray beam position, panoramic OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| X-ray beam position, ceph OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Phantom radiograph, line distances within tolerance | <input type="checkbox"/> | <input type="checkbox"/> | |
| The unit is in compliance with MFG specified tests and safety | <input type="checkbox"/> | <input type="checkbox"/> | |

Technician: _____ Dealer: _____

ORTHOPHOS 3 / 3 Ceph

Yearly Maintenance Checklist

Customer: _____ Address: _____

Dealer: _____ Address: _____

Date of original installation: _____ Date of inspection: _____

Report of Assembly FD 2579 # _____

SCHEDULE

| | Yes | No | Remarks |
|------------------------------|--------------------------|--------------------------|---------|
| All manuals are present | <input type="checkbox"/> | <input type="checkbox"/> | |
| Test instruments as required | <input type="checkbox"/> | <input type="checkbox"/> | |

| | Manufacturer | Model | Accuracy | Last calibrated |
|---------------|--------------|-------|----------|-----------------|
| Voltmeter | | | | |
| mA meter | | | | |
| Pulse counter | | | | |

| | | | |
|---|--------------------------|--------------------------|--|
| Any mechanical damage noticed | <input type="checkbox"/> | <input type="checkbox"/> | |
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| All indicator lights are OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Radiation indicator X-ray lights up, audible buzzer OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Deadman feature OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Power supply adequate | <input type="checkbox"/> | <input type="checkbox"/> | Line voltage:V Voltage drop:V |
| kV – Verification is OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Tube current is within specified limits | <input type="checkbox"/> | <input type="checkbox"/> | Measurement: mA |
| Specified exposure time, panoramic (pulses) OK | <input type="checkbox"/> | <input type="checkbox"/> | Pulse count: |
| Specified exposure times, ceph (average pulses) OK | <input type="checkbox"/> | <input type="checkbox"/> | 1. Average pulse count: 2. Average pulse count: |
| X-ray beam position, panoramic OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| X-ray beam position, ceph OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Phantom radiograph, line distances within tolerance | <input type="checkbox"/> | <input type="checkbox"/> | |
| The unit is in compliance with MFG specified tests and safety | <input type="checkbox"/> | <input type="checkbox"/> | |

Technician: _____

Dealer: _____

ORTHOPHOS 3 / 3 Ceph

Yearly Maintenance Checklist

Customer: _____ Address: _____

Dealer: _____ Address: _____

Date of original installation: _____ Date of inspection: _____

Report of Assembly FD 2579 # _____

SCHEDULE

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|------------------------------|--------------------------|--------------------------|---------|
| All manuals are present | <input type="checkbox"/> | <input type="checkbox"/> | |
| Test instruments as required | <input type="checkbox"/> | <input type="checkbox"/> | |

| | Manufacturer | Model | Accuracy | Last calibrated |
|---------------|--------------|-------|----------|-----------------|
| Voltmeter | | | | |
| mA meter | | | | |
| Pulse counter | | | | |

| | | | |
|---|--------------------------|--------------------------|--|
| Any mechanical damage noticed | <input type="checkbox"/> | <input type="checkbox"/> | |
| All labels are present and legible | <input type="checkbox"/> | <input type="checkbox"/> | |
| All indicator lights are OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Radiation indicator X-ray lights up, audible buzzer OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Deadman feature OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Power supply adequate | <input type="checkbox"/> | <input type="checkbox"/> | Line voltage:V Voltage drop:V |
| kV – Verification is OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Tube current is within specified limits | <input type="checkbox"/> | <input type="checkbox"/> | Measurement: mA |
| Specified exposure time, panoramic (pulses) OK | <input type="checkbox"/> | <input type="checkbox"/> | Pulse count: |
| Specified exposure times, ceph (average pulses) OK | <input type="checkbox"/> | <input type="checkbox"/> | 1. Average pulse count: 2. Average pulse count: |
| X-ray beam position, panoramic OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| X-ray beam position, ceph OK | <input type="checkbox"/> | <input type="checkbox"/> | |
| Phantom radiograph, line distances within tolerance | <input type="checkbox"/> | <input type="checkbox"/> | |
| The unit is in compliance with MFG specified tests and safety | <input type="checkbox"/> | <input type="checkbox"/> | |

Technician: _____ Dealer: _____

ORTHOPHOS 3 / 3 Ceph

Yearly Maintenance Checklist

Customer: _____ Address: _____

Dealer: _____ Address: _____

Date of original installation: _____ Date of inspection: _____

Report of Assembly FD 2579 # _____

SCHEDULE Yes No Remarks

All manuals are present

Test instruments as required

| | Manufacturer | Model | Accuracy | Last calibrated |
|---------------|--------------|-------|----------|-----------------|
| Voltmeter | | | | |
| mA meter | | | | |
| Pulse counter | | | | |

Any mechanical damage noticed

All labels are present and legible

All indicator lights are OK

Radiation indicator **X-ray** lights up, audible buzzer OK

Deadman feature OK

Power supply adequate Line voltage:V
Voltage drop:V

kV – Verification is OK

Tube current is within specified limits Measurement: mA

Specified exposure time, panoramic (pulses) OK Pulse count:

Specified exposure times, ceph (average pulses) OK 1. Average pulse count:
2. Average pulse count:

X-ray beam position, panoramic OK

X-ray beam position, ceph OK

Phantom radiograph, line distances within tolerance

The unit is in compliance with MFG specified tests and safety

Technician: _____

Dealer: _____

ORTHOPHOS 3 / 3 Ceph

Yearly Maintenance Checklist

Customer: _____ Address: _____

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Date of original installation: _____ Date of inspection: _____

Report of Assembly FD 2579 # _____

SCHEDULE

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|------------------------------|--------------------------|--------------------------|---------|
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ORTHOPHOS 3 / 3 Ceph

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ORTHOPHOS 3 / 3 Ceph

Yearly Maintenance Checklist

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ORTHOPHOS 3 / 3 Ceph

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ORTHOPHOS 3 / 3 Ceph

Yearly Maintenance Checklist

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Order No

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