



**IRIX 70 - E**  
**INTRA-ORAL X-RAY SYSTEM**  
**INSTALLATION AND SERVICE MANUAL**

THIS MANUAL MUST BE RETAINED AT THE INSTALLATION SITE

# IMPORTANT ! ... X-RAY PROTECTION

X-ray equipment may cause injury if used improperly. The instructions contained in this manual must be read and followed when operating the IRIX 70-E.

TROPHY dealers will be glad to assist you in putting the IRIX 70-E into operation.

The IRIX 70-E provides a high degree of protection from unnecessary X-radiation. However, no practical design can provide complete protection, nor prevent operators from exposing themselves or others to unnecessary radiation.

It is important that you be fully acquainted with applicable government radiation protection regulations. Many provisions of these regulations are based on the recommendations of the National Council on Radiation Protection and Measurements. Recommendations for dental X-ray protection are published in NCRP Report Number 35 available from NCRP Publication, P.O. BOX 30175, Washington, D.C. 20014.

Personnal radiation monitoring and protective devices are available. You are urged to use them to protect against unnecessary X-radiation exposure.

## TABLE OF CONTENTS

### I) Pre-Installation

1) Compatibility.....	1
2) Packing .....	1
3) Tools Required .....	2
4) Mechanical Requirements .....	2
5) Electrical Requirements .....	3

### II) Installation

A) Mechanical .....	3
1) IRIX 70-E System .....	3
a) Wall Bracket .....	3
b) Extension arm .....	4
c) Scissor arm .....	4
d) Tubehead .....	5
2) Large Wall Bracket Option (AD137) .....	5
3) Remote station option (AD591) .....	6
4) Remote switch option (AD142) .....	6
B) Electrical .....	6
1) IRIX 70-E system .....	6
2) Remote station option (AD591) .....	6
3) Remote Switch Option (AD142) .....	6

III) Mechanical Adjustments .....	10
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IV) Electrical Calibration .....	11
----------------------------------	----

V) System Function Checks, Certification and Maintenance Schedule .....	14
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VI) Trouble-shooting and schematics .....	15
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# I - PRE-INSTALLATION

## 1) COMPATIBILITY

The IRIX 70-E consists of the following certified components manufactured by TROPHY :

	<b>PART #</b>
Tube housing assembly	AD 060
X-ray control	AD 213
8" focal length cone	FU 047

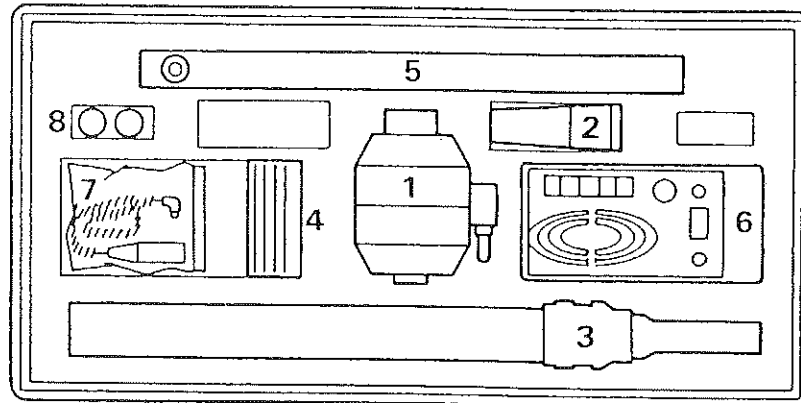
The certified components of the IRIX 70-E system comply with Radiation Performance Standards 21 CFR, Sud Chapter J, at time of manufacture.

The suspension (wall mounted arm) is referenced as part # AD 004 and is not required to be certified.

### Accessories :

12" (30 cm) extension arm	DS 007
24" (60 cm) extension arm	DS 008
32" (80 cm) extension arm	DS 021
16" x 18 <sup>1</sup> / <sub>2</sub> " large wall bracket	AD 137
Remote switch	AD 142
Remote station	AD 591
12" focal length cone	FU 060
4 x 4" mount	CL 008

## 2) PACKING

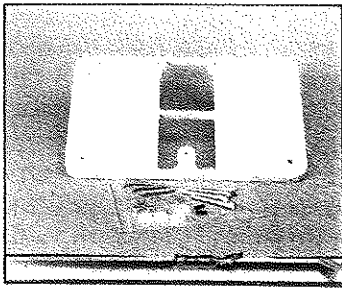


(L) 38.8" x (W) 19.5" x (H) 11.4"

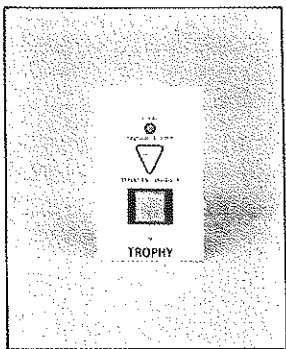
ITEM	DESCRIPTION	PART #
1	TUBEHEAD	AD 060
2	BEAM LIMITING DEVICE, 8"	FU 047
3	SCISSOR ARM	AD 004
4	PLASTIC TOP COVER FOR SCISSOR ARM	
5	EXTENSION ARM	12" 24" 32" DS 007 DS 008 DS 021
6	WALL BRACKET ETX TIMER	AD 546 AD 213
7	HANDSWITCH	LV 033
8	TOUCH-UP PAINT	
7	SPARE-PARTS BAG CONTAINING - SPARE SCREWS AND WASHERS - (3) LAG BOLTS - ARM ADJUSTMENT TOOL	

OPTIONS

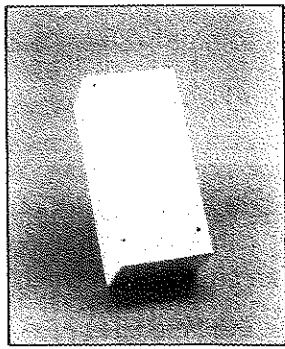
AD 137



AD 142



AD 591



3) TOOLS REQUIRED

LEVEL/POWER DRILL/MULTIMETER/LEAD COVER/FLUOROSCOPIC SCREEN/SCREWDRIVER/METRIC ALLEN KEYS/BOX END WRENCH/NEEDLE NOSE PLIERS

4) MECHANICAL REQUIREMENTS

\* REACH AND COVER

Reach and Cover of the system can be found on the IRIX 70-E pre-installation template (enclosed).

The handswitch is plugged into the system with a coiled cord which can be extended to 10 feet (3 meters), to allow the operator to reach a position at least 5 feet (1.5 meters) from the patient.

The operator must stay out of the path of the primary beam from the tubehead. Use of a remote control box (AD 591) or remote exposure switch (AD 142) is recommended to provide this function.

\* MOUNTING

Different fastening systems may be used depending on the nature of the wall.

Three lag bolts are provided to mount the IRIX 70-E on a wooden plate.

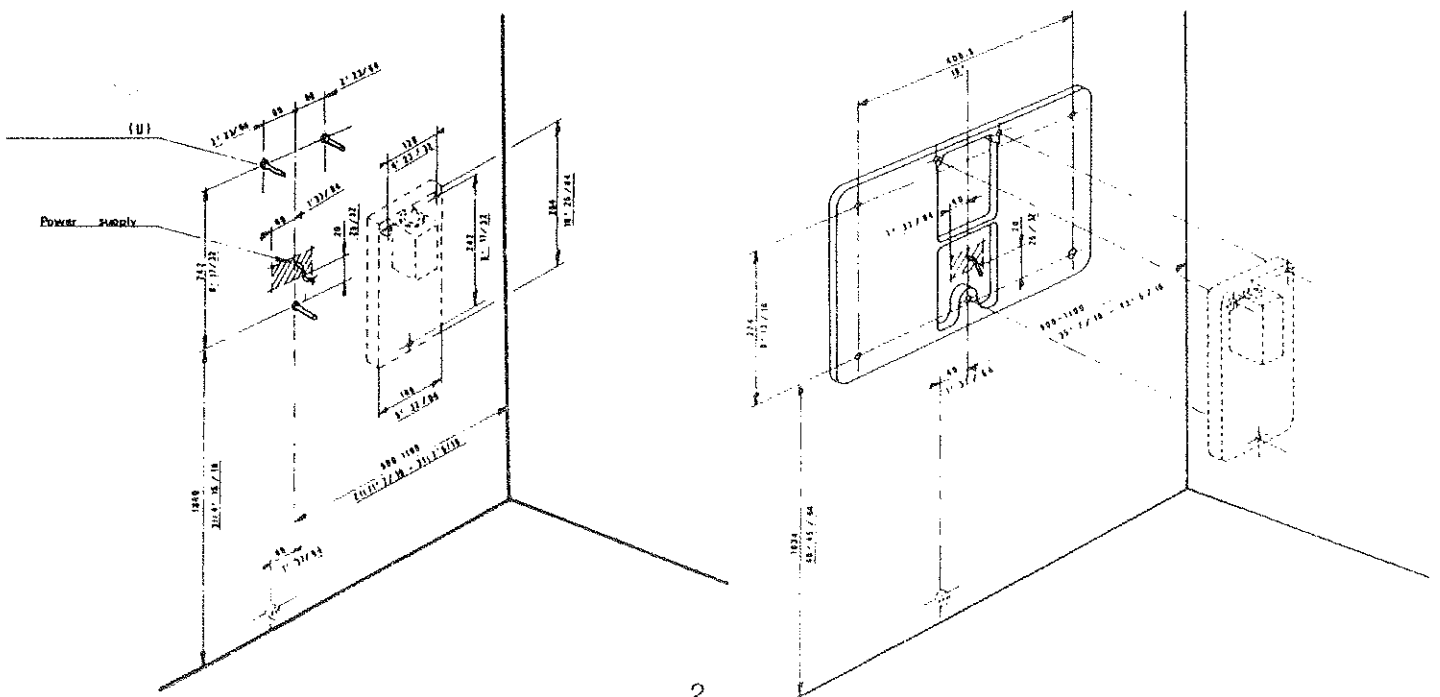
For mounting on studs 16" apart, a large wall bracket (AD 137) must be used.

For a wall with metal studs or a concrete wall, use 3/8" threaded rods of the correct length.

For all types of wall construction, mounting hardware must withstand a 100 pound shear load and 400 pounds withdrawal force at each mounting location.

The wall fabrication and attachments to the building structure must be capable of withstanding a load moment couple of 850 ft. lbs.

The dimensions of the standard (AD 546) and large (AD 137) wall brackets may be found on the pre-installation template. Mounting locations are shown below for those brackets.



## REQUIREMENTS

Voltage : 99 Volts minimum to 125 Volts maximum, no load.

Current : 10 amperes during exposure

Voltage fluctuation : 3 %

The electrical service distribution center to the X-ray control box or from the X-ray wall bracket(s) must contain :

Power neutral wire and ground wire, type SPT-2, SP-2, SPE-2, SVT, SVTO, SVE or equivalent cable cord.

# 12 wire - up to 100 ft (30 m)

# 10 wire - 100 ft (30 m) to 50 ft (46 m)

Wiring must be on a separate fuse or circuit breaker, rated at a minimum of 15 amps. No other loads are permitted on the circuit (dedicated line).

If a ground wire is not used, wire cable must be type SJT, SJTO, SJO, ST, SO, STO or equivalent

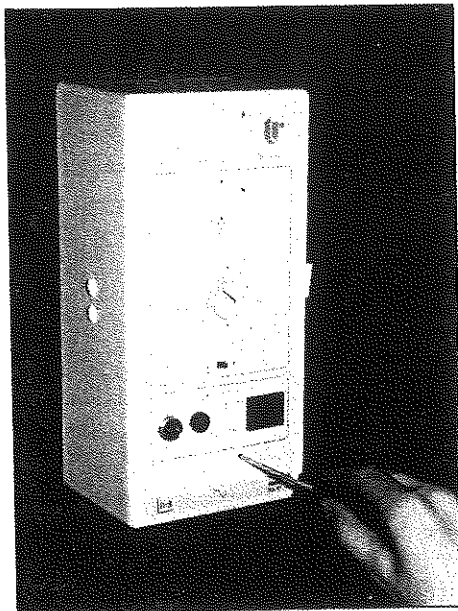
## II - INSTALLATION

ITEM

SET

Control box

Use screws that fasten  
to wall bracket



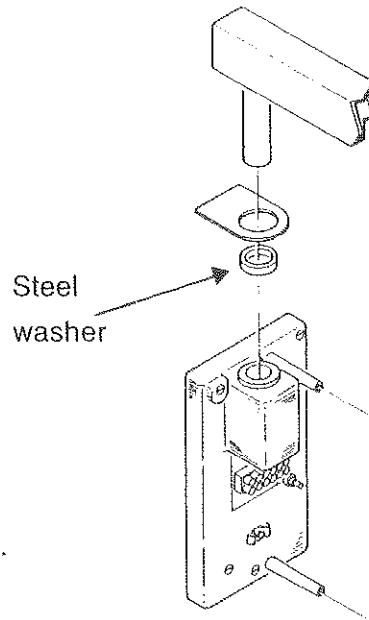
### b) EXTENSION ARM

- Make sure that the steel washer is in place on one extension arm pivot (wall bracket side) and that the nylon ring is in place on the other pivot.

**DO NOT GREASE OR OIL THE PIVOT**  
(it comes with a self-lubrication ring)

- Insert one pivot of the extension arm into the hole on the top of the wall bracket (the pivot with the steel washer)

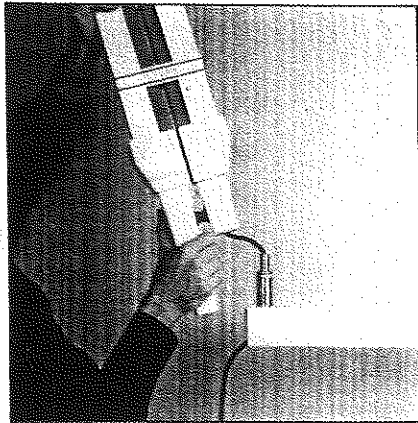
- Make sure the extension arm is level or slightly rising.



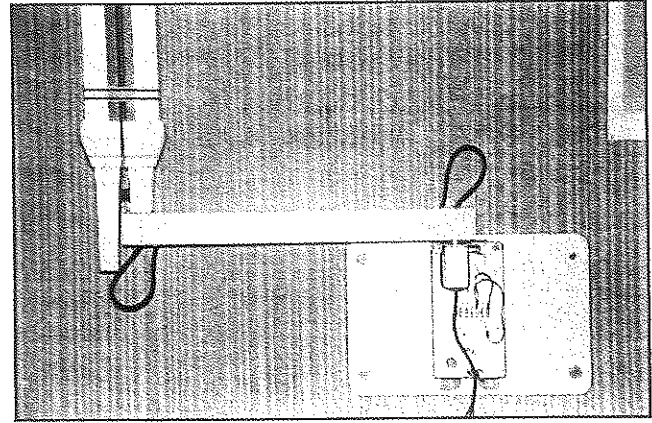
### c) SCISSOR ARM

**WARNING : DO NOT REMOVE THE ARM RESTRAINT UNTIL THE HEAD IS ATTACHED TO THE ARM.**

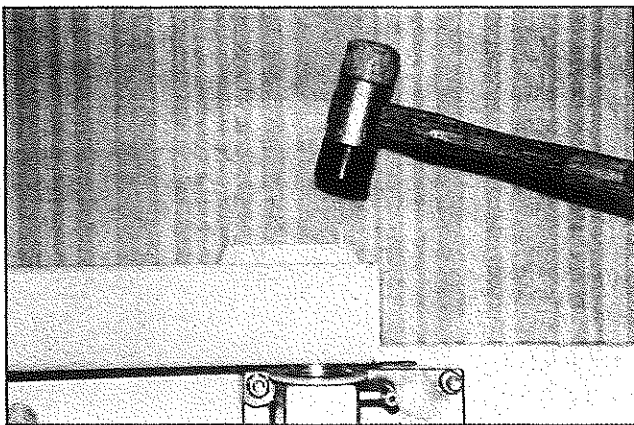
Due to the spring tension of the counterbalance mechanism, the scissor arm might suddenly swing open and cause injury.



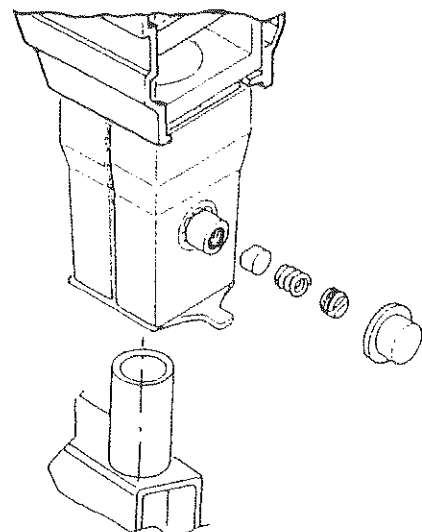
- Do not grease the extension arm pivot (it is self-lubricating).
- Insert the tubehead cable into the pivot.
- Put the scissor arm on the pivot



- Thread the cable through the extension arm (a guide inside the arm facilitates this step so that no string is required)
- Thread the cable through the extension arm pivot down to the wall bracket.

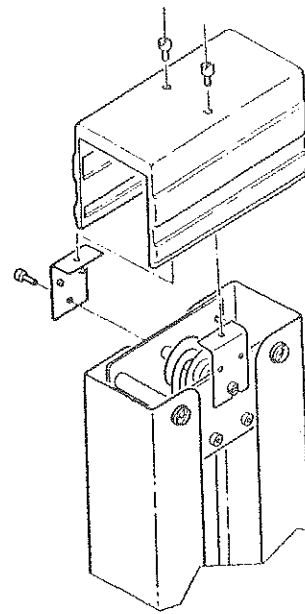


- Position the plastic caps to hide the cable
- Hammer in the 2 plastic pins that will hold each cap.



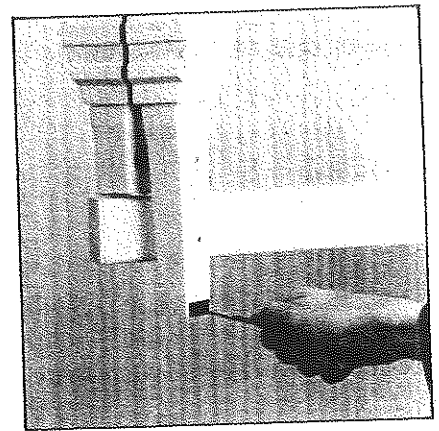
- Install the rotation brake on the scissor arm

- Install the upper plastic cover



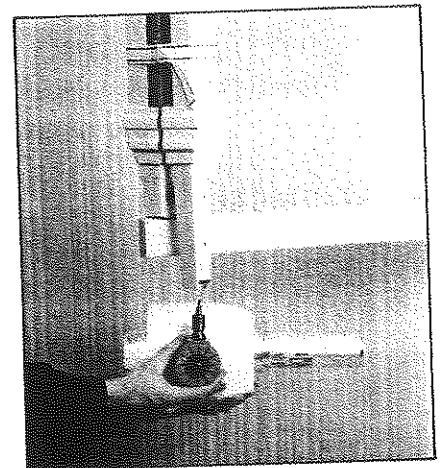
#### d) TUBEHEAD

- Remove the locking collar from the scissor arm



- Grease the rotating plug of the tubehead ; insert it into the arm.

- Hold the tubehead firmly in place, then insert the locking collar, place the fixing screw and tighten it. Proceed to II-B (Electrical installation)



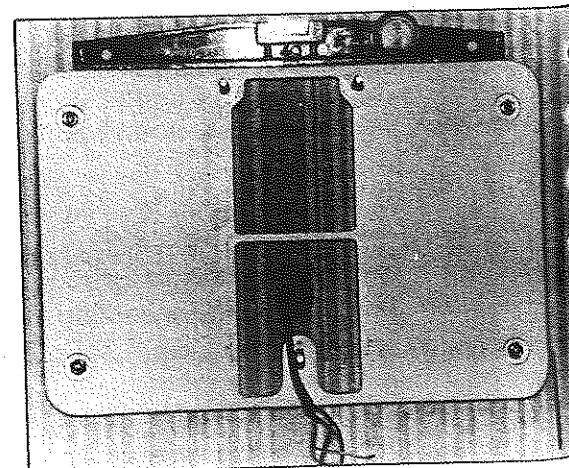
#### 2) LARGE WALL BRACKET OPTION (AD 137)

- Use the provided template to prepare the installation.

- Affix the set of three screws that will receive the regular wall bracket of the system.

- Fasten the bracket with the four lag bolts (provided). The power wire can go through the central hole of the bracket (see figure below).

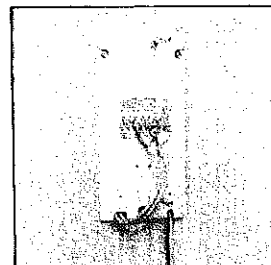
- Proceed with the installation as described earlier in section II-A-1.



### 3) REMOTE STATION OPTION (AD 591)

- Install the X-ray as previously described (section II-A-1)
- Electrical requirement : a 3 conductor wire between the X-ray mount and the timer location (see section I-5)
- Mounting requirements for the remote station are :
  - 2 kg (4.41 lbs) shear load and
  - 4.5 kg (9.92 lbs) withdrawal force at each mount
- For the location of the remote station use the pre-installation template
- Unpack the wall box and remove the cover from the bracket

- Place the bracket on the wall ; thread the power wires and the connection wires coming from the X-ray mount through the holes provided (see template and photo).



- Fasten the bracket to the wall with 3 screws.

### 4) REMOTE SWITCH OPTION (AD 142)

- The exposure time on the timer should be visible from the switch location
- Electrical requirements : a 3-conductor cable going from the X-ray mounting location to the switch location ; the overall resistance of the closed circuit should not exceed 0.3 ohms.
- Install a gang box into the wall and prepare the 3-conductor cable
- Install the X-ray system as described previously in section I-A-1

## **B) ELECTRICAL**

### 1) IRIX 70-E SYSTEM

- Make the connections according to fig. page 7

### 2) REMOTE STATION OPTION (AD 591)

- Make the connections according to fig. page 8
- Remove the white front cover from the remote station box (4 nuts)
- Remove the ETX timer from the wall bracket box (4 nuts) and fix it on the remote station box.
- Place the white cover on the wall bracket box
- Close the remote station and proceed to section III.

### 3) REMOTE SWITCH OPTION (AD 142)

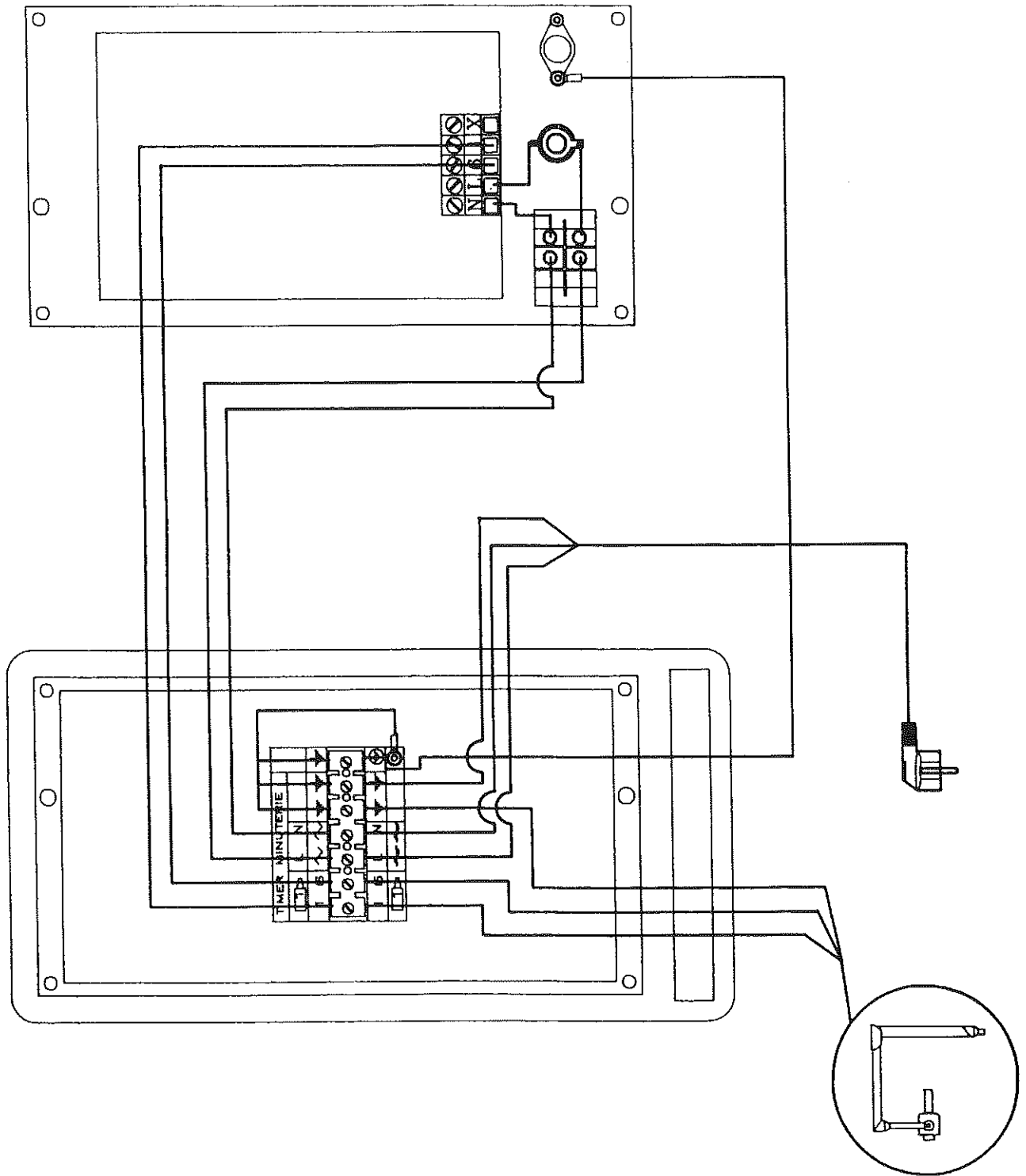
- Make the connections according to fig. A page 9
- Mount the switch onto the gangbox (fig. B page 9).



# WIRING DIAGRAM (IRIX70-E)

WALL BRACKET

ETX

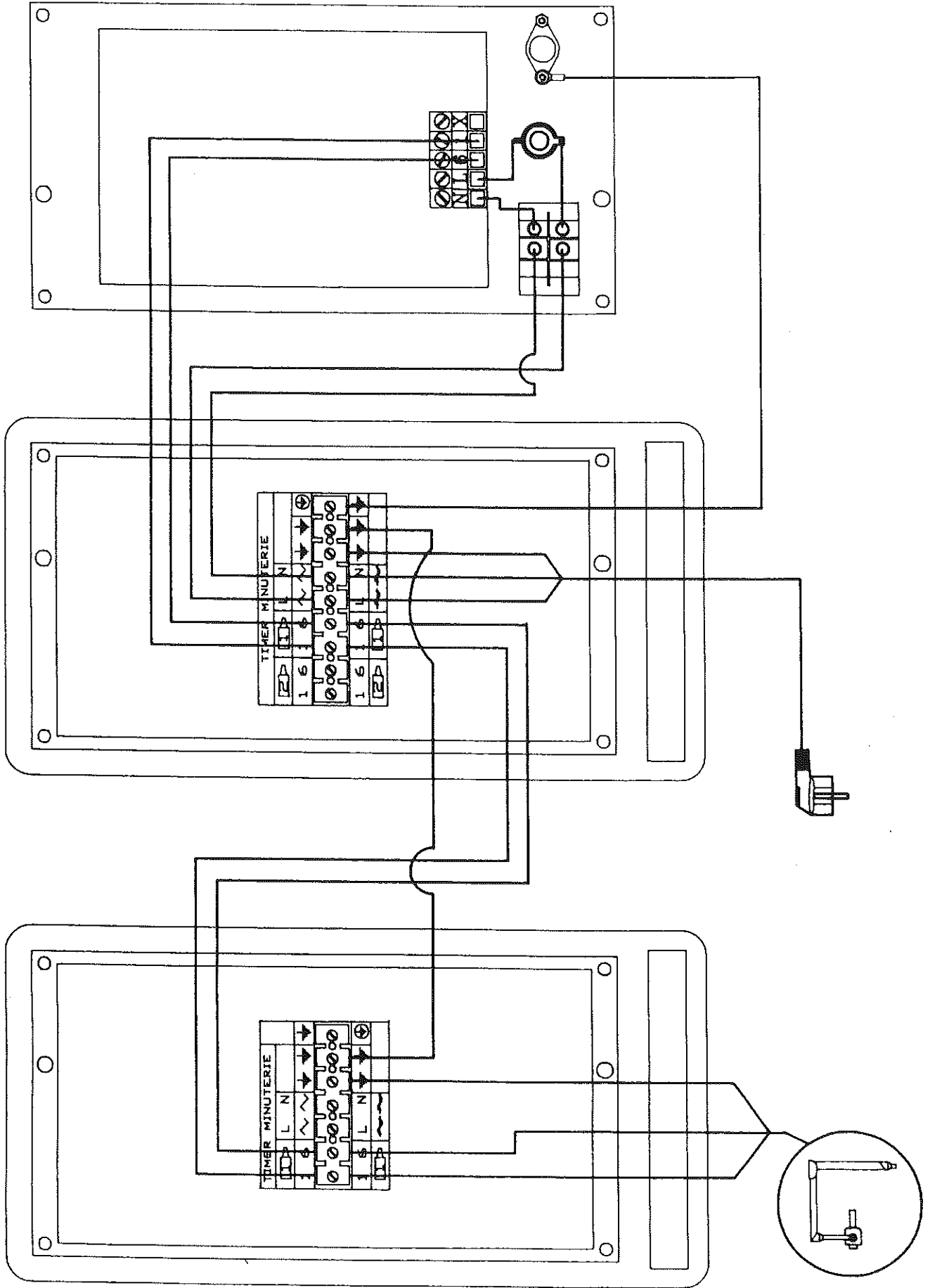


CONNECTIONS WITH REMOTE STATION (IRIX 70-E)

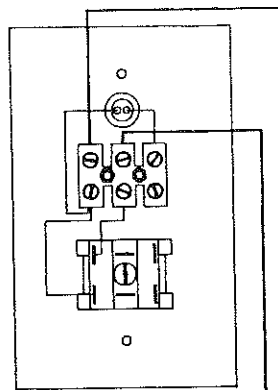
WALL BRACKET

REMOTE STATION

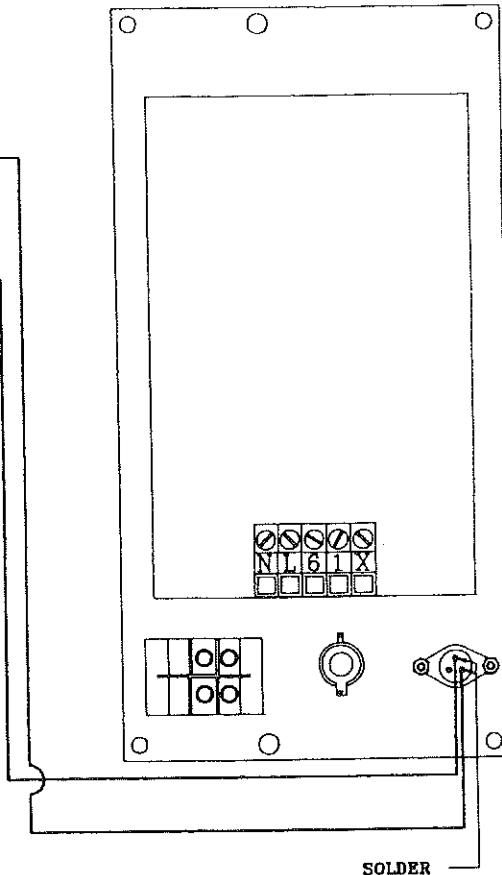
ETX



REMOTE SWITCH

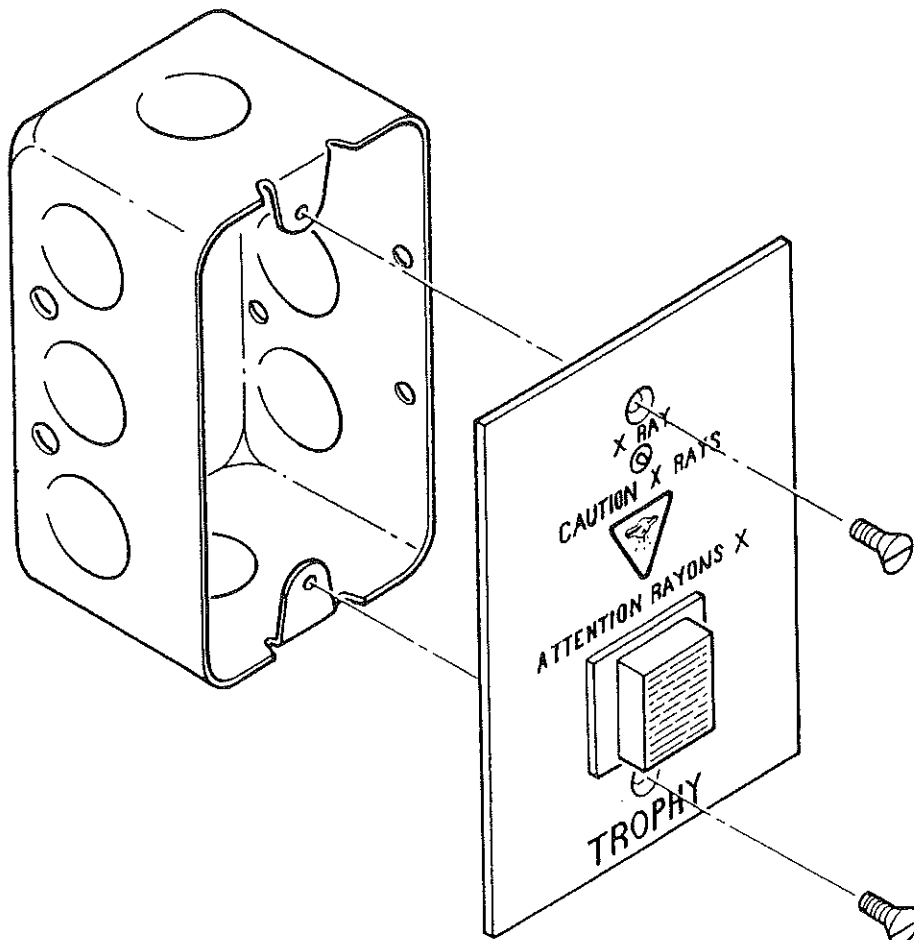


AD142



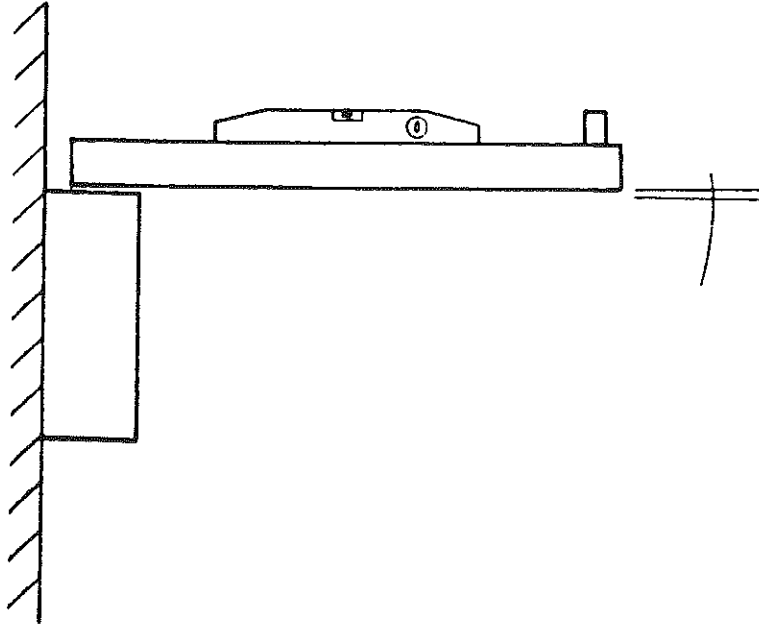
Note : the light of remote switch will not function. This light only operates with a CCX-Digital Timer

SOLDER

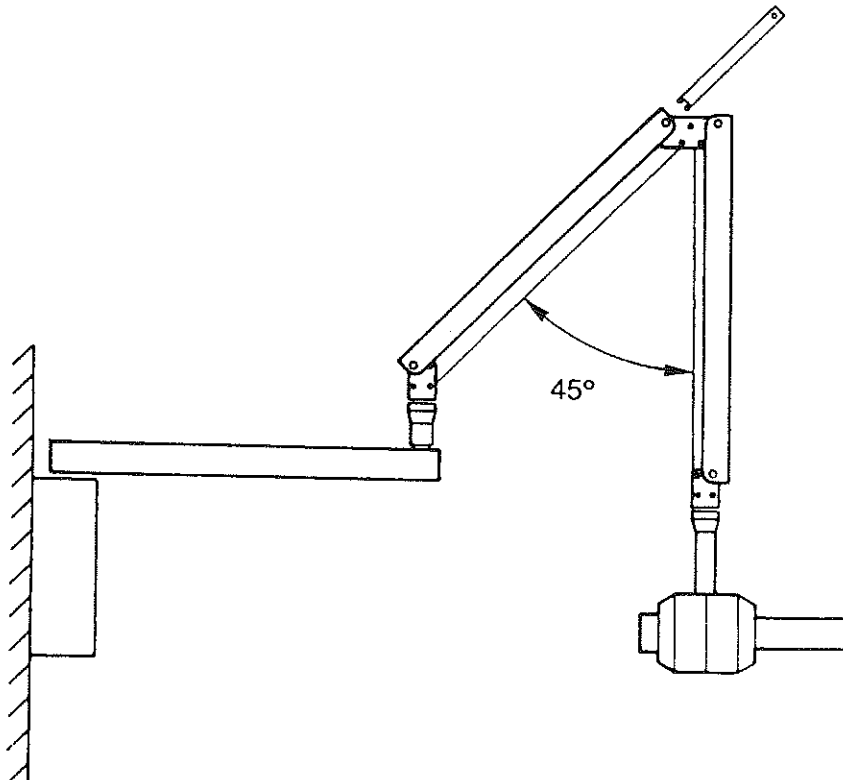


### III - MECHANICAL ADJUSTMENTS

- If the wall is not plumb, the extension arm may not be exactly level. In this case, use shims on the lag bolts as required.

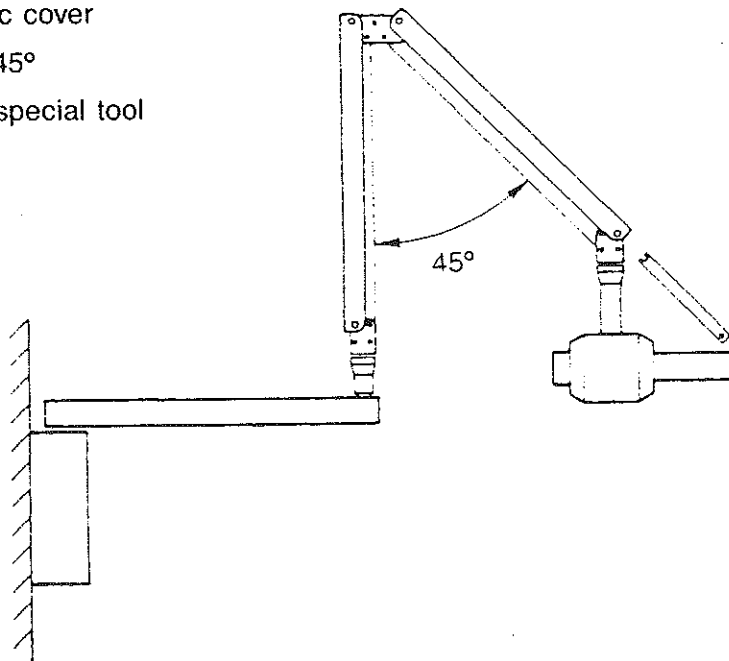


- ARM ADJUSTMENT, INBOARD ARM (see figure below)
  - Remove the plastic cover and the plastic cover support
  - Place the arm at 45°
  - Adjust it with the special tool



- ARM ADJUSTMENT, OUTBOARD ARM (see figure below)

- Remove the plastic cover
- Place the arm at 45°
- Adjust it with the special tool



- Horizontal drift adjustment

- Tighten the brake to stop any horizontal drift

## IV - ELECTRICAL CALIBRATION

### WARNING

Radiation will be produced during the electrical calibration.  
Therefore a lead cover must be placed over the X-ray head zone

These calibration procedures must be followed to insure that the installation complies fully with applicable regulations, if the required measurements values are not correct, contact TROPHY for information, and advise the user not to operate the equipment.

### INSTRUMENTS CALIBRATION

TYPE OF INSTRUMENT	RANGE	ACCURACY
AC Voltmeter (RMS digital meter)	0 - 150 VAC RMS	= 1.5 V
DC milliammeter	0 - 10 mA	± 0.1 mA

## MEASUREMENTS

### CAUTION

- 1) Make sure that the supply wires which connect the unit to the meter are in good condition, of sufficient diameter and that the intermediate accessories (junction boxes, fuses, etc...) do not have any poor contacts, which could cause voltage surges and damage the X-ray tubehead.
- 2) Make sure the timer is OFF (power switch on O)
- 3) Connect AC voltmeter to read 100 to 130 VAC on power switch connection of the ETX.
- 4) Turn the timer ON (power switch on I) record the voltmeter reading. "NO LOAD" line voltage on the calibration calculation.

### CALCULATION

$$\frac{\text{no-load power voltage} - \text{in load power voltage}}{\text{in load power voltage}} \times 100 = \quad \%$$

- 5) Verify that the voltage distribution is correctly connected (see table below)  
Adjust the distributor voltage according to the power supply voltage reading (fig. 4.2)

Line Voltage	Distributors
99 to 109 Volts	100
109 to 118 Volts	110
119 to 125 Volts	120 (standard)

### CAUTION - If it is necessary :

To adjust the voltage distributor switch the timer OFF, then remove the plastic cover from the rotating part on the tube housing assembly. (fig. 4.1)

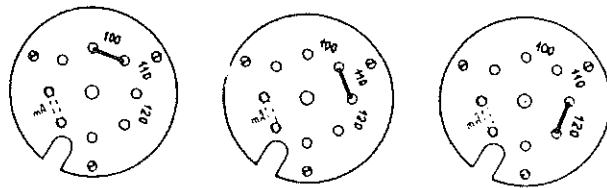


Fig. 4.2

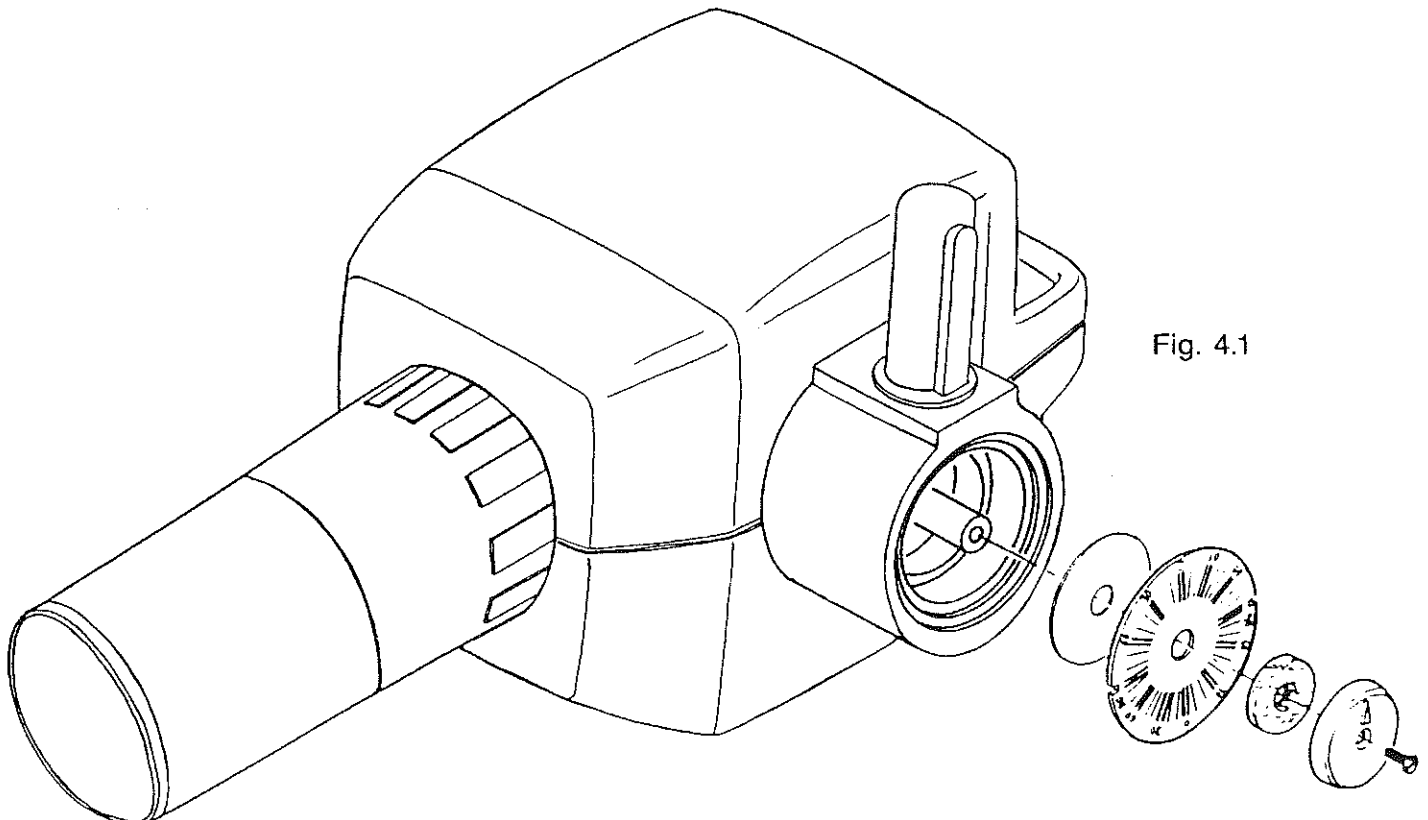


Fig. 4.1

- 6) Turn the timer ON  
Select an exposure time of 2.0 sec.  
Make an exposure (push the exposure button)
- 7) Record "In load" voltage in the formula on page 12 and make the calculation
- 8) The result should never be more than 3 % of the rated value  
If it is, increase the diameter of the power wires from the breaker box to the unit (a dedicated circuit is required).  
Use a power conditioner if the power is unstable during the day.
- 9) Turn the X-ray control OFF
- 10) Remove the tubehead pivot plastic cover (fig. 4.1)
- 11) Remove the "MA STRAP JUMPER" (fig. 4.3)
- 12) Connect a DC MA meter to terminal MA and  $\perp$  (fig 4.4)
- 13) Turn the X-ray control ON and select an exposure time of 2.0 sec.
- 14) Make an exposure (push the exposure button)  
The MA reading should be between 6.65 and 9.3 mA. If the value is not correct, contact TROPHY technical support.

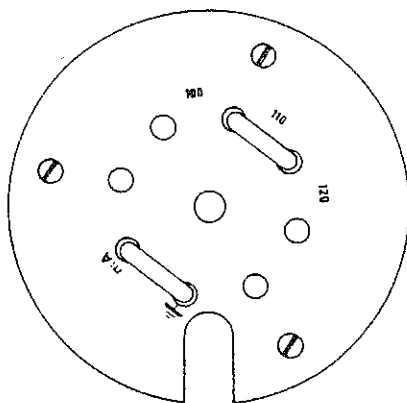


Fig. 4.3

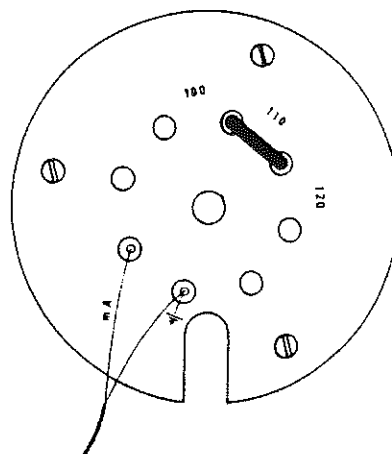


Fig. 4.4

- 15) Turn the X-ray control OFF and remove the DC-MA meter
- 16) Replace the MA strap and plastic cover
- 17) Remove the lead cover from the Beam Limiting Device (cone)
- 18) Put the timer in the wall box and secure it with the two fixing screws.

## **V - SYSTEM FUNCTION CHECKS, CERTIFICATION AND MAINTENANCE SCHEDULE**

The system function check is to be performed at the end of the installation. It should also be performed, as part of the PERIODIC MAINTENANCE, at 12 months intervals.

**IMPORTANT :** If the IRIX 70-E system does not perform the functions, see the trouble shooting section of this manual, or contact TROPHY technical support. Advise the customer that the system is not to be used.

### **1/ TUBE HOUSING ASSEMBLY (TUBEHEAD)**

- a) Check that the certification label is legible and intact.
- b) Check that there is no oil leakage and no physical damage that could cause unsafe radiation levels.

### **2/ BEAM LIMITING DEVICE (CONE)**

- a) Check that the certification label is legible and intact
- b) Check that the BLD is securely attached to the tube housing assembly
- c) Check for physical damage and verify that the BLD allows a source-to-skin distance of 20 cm.

### **3/ SUSPENSION**

- a) Check that the wall mount is properly fixed and rigid
- b) Check the arm in all positions for wear and looseness

### **4/ X-RAY CONTROL**

- a) Check that the warning label and the certification label are legible and intact
- b) Verify that the exposure handswitch and the coiled cord are in good condition and that the exposure push-button releases.
- c) Turn the power ON and verify that the power indicator lights
- d) *Select tooth (27-28) and film type 5 ; make an exposure, check that the buzzer is audible to the operator and ceases to beep at the end of the exposure. Also check that the exposure indicator light is visible.*

### **USER'S MANUAL**

At the end of this check, verify that the user has a USER'S manual.



## **CERTIFICATION RESPONSABILITY**

The IRIX 70-E system is certified to comply with the provisions of the United States Government Radiation Performance Standards when assembled, calibrated and checked according to the instructions given in this manual.

It is the responsibility of the installer to :

- 1/ Assemble the system according to the previous sections
- 2/ Perform the Electrical Calibration and System Function Checks.
- 3/ Complete and distribute copies of the United States Form FD 2579 for installations subject to the United States jurisdiction. Upon completion of installation, system/function checks, and calibration, the certification form (FD 2579) is to be completed and distributed according to provisions of US LAW.
- 4/ Return the warranty card to TROPHY
- 5/ Maintain records of the location of the equipment.

## **VI - TROUBLE SHOOTING AND SCHEMATICS**

This trouble shooting guide includes technical data to identify and repair electrical malfunctions.

### **SIMPLIFIED THEORY OF OPERATION**

The following simplified theory of operation explains the function of the IRIX 70-E system.

This information is provided to give the TROPHY service representative a general understanding of the system.

### **EXPOSURE SEQUENCE**

#### *1/ Switch the X-ray control ON*

- The power indicator lights

#### *2/ Preset the program*

- Select an exposure of 0.32 sec.

#### *3/ Press the handswitch*

- Relay K1 is energized (on) (safety relay)
- Circuit U4 Q5 is energized (filament preheat)
- Circuit U3 Q4 is on (exposure time)
- The timed X-ray exposure begins

#### *4/ Exposure termination*

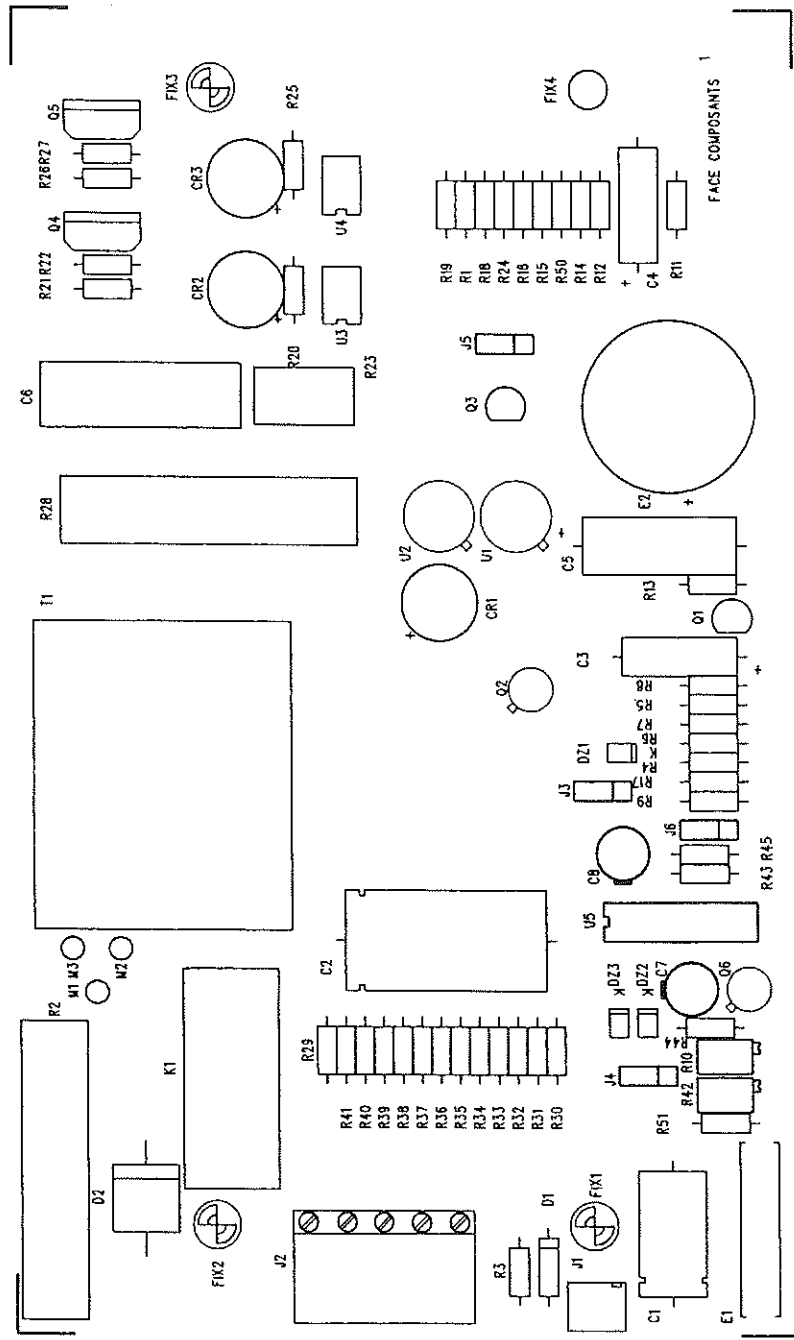
- The circuit U3 Q4
- Input voltage to tubehead goes to 0
- Exposure terminates and X-ray light and buzzer go OFF
- Release the handswitch
- Safety relay K1 goes OFF

## Problem solving

In case of a problem, please go through the trouble-shooting chart of the user's manual. Then follow these steps according to the problem :

PROBLEM	ANALYSIS	ACTIONS
No LED lights up at power ON	<ol style="list-style-type: none"> <li>1) There is no voltage across N and L on the wall bracket electric terminal</li> <li>2) Main switch of the timer is in off position</li> <li>3) Main fuse on the front panel is burned</li> <li>4) 0.315A fuse on the power board is burned</li> <li>5) No voltage between the two contacts on the right side of the main switch</li> <li>6) The voltage selector is not in place on the power board</li> </ol>	<ul style="list-style-type: none"> <li>- Circuit breaker is in off position</li> <li>- Power supply line defective</li> <li>- Wrong connection of the power supply wires</li> <li>- Switch to on position</li> <li>- Replace the fuse</li> <li>- Replace the fuse</li> <li>- Main switch out of order ; replace the switch</li> <li>- Replace the voltage selector</li> </ul>
No X-ray when the switch is depressed	<ol style="list-style-type: none"> <li>1) The switch is not connected</li> <li>2) Handswitch or remote switch not properly connected or defective</li> <li>3) The tubehead is not connected</li> <li>4) Wires 1 and 6 (the tubehead wires) are not properly connected</li> <li>5) Wires 1, 6 inverted in the arm rotating socket or at the timer terminal</li> </ol>	<ol style="list-style-type: none"> <li>1) Connect the switch</li> <li>3) Check the wiring, then the switch</li> <li>- Connect the tubehead</li> <li>- Check that 1, 6 are properly connected on the tubehead selected</li> <li>- Check that 1, 6 are not screwed on the insulating material</li> <li>- Pull the tubehead out and verify that there is no continuity of wire 1 to the central pin of the arm rotating socket. Invert 1 and 6 on the timer.</li> </ol>

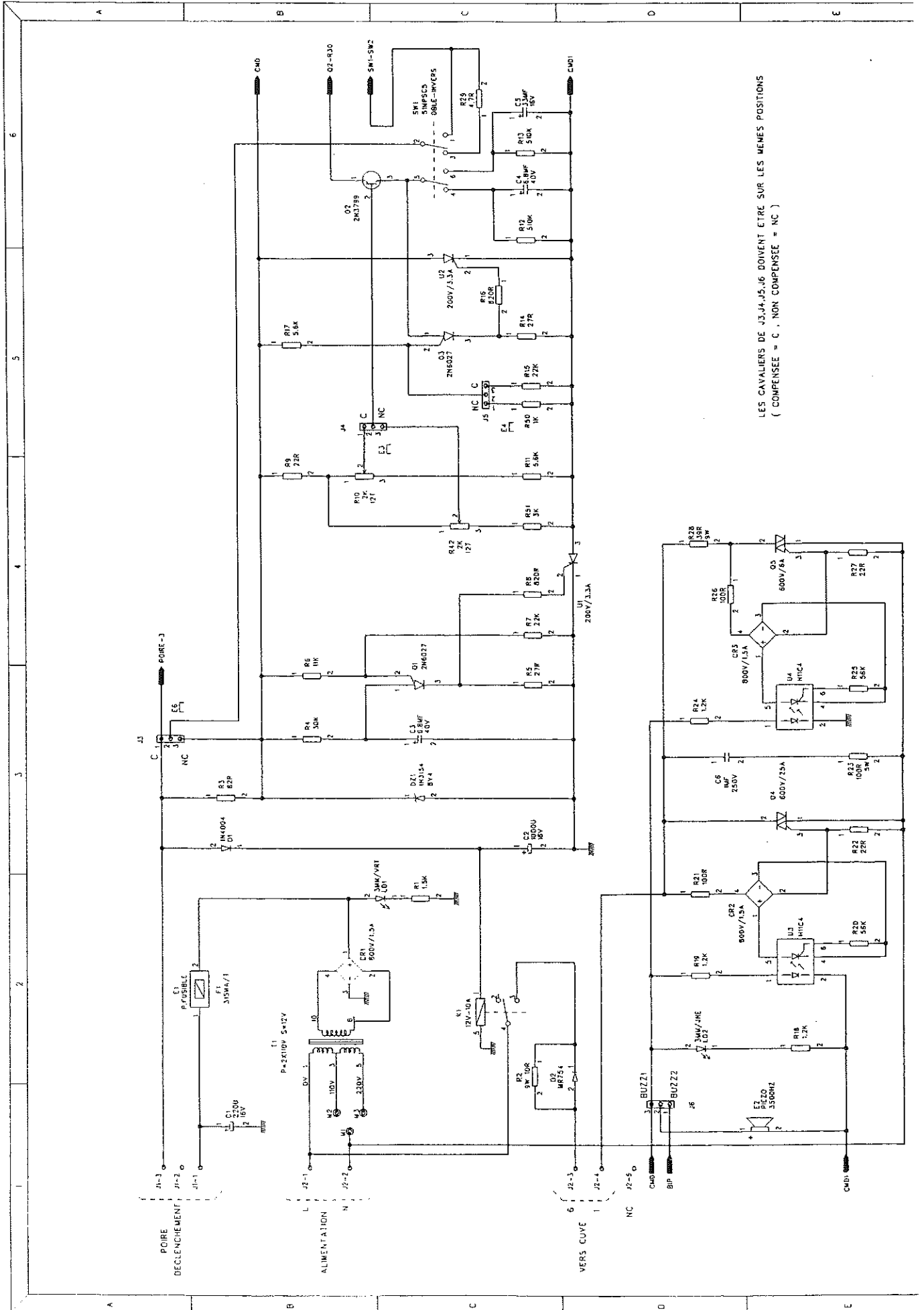
	<p>6) U-shaped jumper of voltage selector in the tubehead fell off</p> <p>7) Bad current conduction of the tubehead cables (1,6)</p> <p>8) Voltage drop too great due to a poor section of the wires or a poor installation or a common line with other equipments (make "load no load" test)</p> <p>9) Defective tubehead (the tubehead emits a craking noise)</p> <p>10) Defective timer</p>	<p>- Tighten it with a pair of pliers and put it back on</p> <p>- Pull the tubehead out</p> <p>- Disconnect 1, 6 on the timer and verify that there is no continuity of wires 1 to the central pin of the arm rotating socket ; also verify that there is no continuity of wire pin of the arm rotating socket.</p> <p>- Change the cable</p> <p>- Make a direct line between the X-ray and the power source.</p> <p>- Change the tubehead</p> <p>- Change the timer</p>
<p>Low X-ray output</p>	<p>1) Switch released before the end of the exposure</p> <p>2) Wrong exposure time</p> <p>3) Defective handswitch or remote switch</p> <p>4) Test mA current</p>	<p>- Select the correct exposure time</p> <p>Change the switch</p> <p>- If &lt; 6.35 mA, replace the tubehead</p>



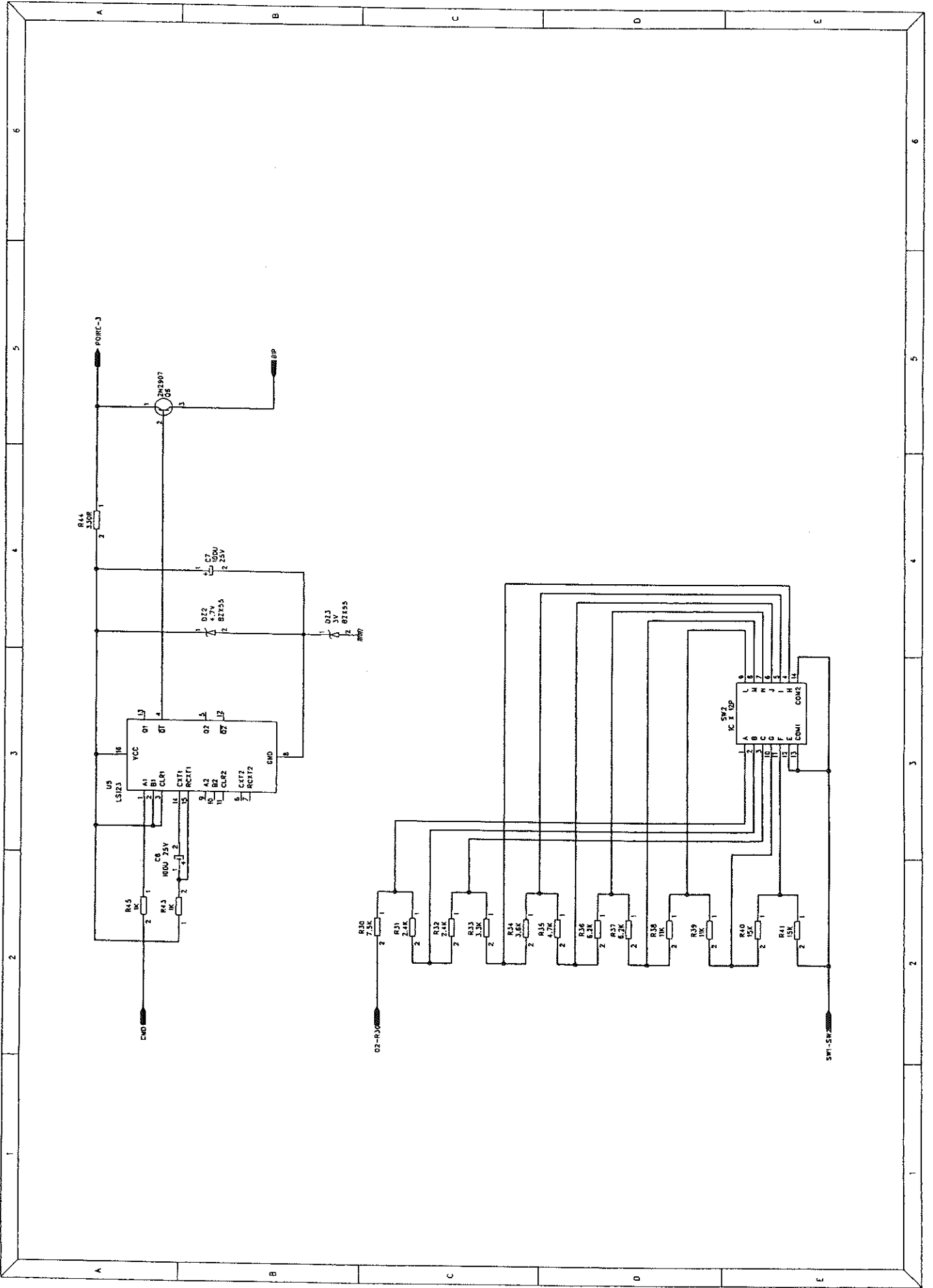
LECTURE COUCHE

- M218
- M217
- M101
- M100
- M102
- M103
- M111

# POWER CIRCUIT DIAGRAM - 1



LES CAVALIERS DE J3, J4, J5, J6 DOIVENT ETRE SUR LES MEMES POSITIONS  
( COMPENSEE = C , NON COMPENSEE = NC )





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**trophy**

**INTRA-ORAL X-RAY UNIT**

**IRIX 708**

**NOVELIX 6510**

**WITH**

**CCX DIGITAL TIMER AND SCISSOR ARM**



**PREVENTIVE MAINTENANCE PROCEDURES**

**ADDENDUM TO THE USER, INSTALLATION AND MAINTENANCE MANUALS**

**THIS ADDENDUM MUST REMAIN AT THE PREMISES OF THE INSTALLATION**

**ADDENDUM TO THE USER,  
INSTALLATION AND MAINTENANCE MANUALS.**

*This information complements the preventive maintenance chapter described on page 12 of the user manual and described in paragraph 2 - page 24 of the installation and maintenance manual.*

## PREVENTIVE MAINTENANCE AND WARRANTY

### ☞ MAINTENANCE

This unit is designed to provide reliable performance and diagnostic capabilities. In order to assure safe performance of this unit, a preventive maintenance program must be annually performed for a first level maintenance and every two years for a second level maintenance. It is the owner's responsibility to supply or arrange for this service. Consult your Trophy dealer to arrange for this service. Verify that you have a stamped and signed maintenance certificate stipulating the potential controls and repairs.

### ☞ MAINTENANCE PROGRAM

#### **First Level (periodicity : annually)**

##### *Generator*

- check that the specification label is intact and legible.
- check that there is no oil leakage
- check that the cone is correctly tightened to assure a 20 cm distance between the focal spot and the skin of the patient.
- check that the plastic locking collar which attaches the generator to the arm is correctly positioned and that the screw is tight. Otherwise the generator could drop causing damage to the unit and possible injury to people alongside.

##### *General attachment of the complete unit and scissor arm.*

- check that the wall bracket is solidly attached. If not, repeat the complete installation procedure, following the instructions in the installation chapter scrupulously.
- If the unit includes an 80 cm extension arm, check that a stop system on the extension arm prevents the scissor arm rotating through 360° which could damage the power supply cable.
- check that the arm moves smoothly in all positions but remains immobile once released. Otherwise adjust the brake and the springs.



*Timer*

- Check that the handswitch button returns to its initial position when released. Otherwise change the handswitch.
- make an exposure (tooth 27/28 et film type 5) and check that the X-ray light comes on during exposure and the audible signal stops at the end of the X-ray emission.

*Electrical Installation*

- Check that the unit is correctly linked to earth.
- Check that the power supply value is within the limits accepted by the unit.

**SECOND LEVEL (PERIODICITY: EVERY TWO YEARS)**

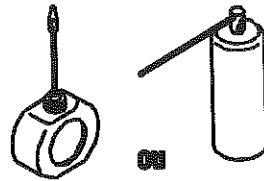
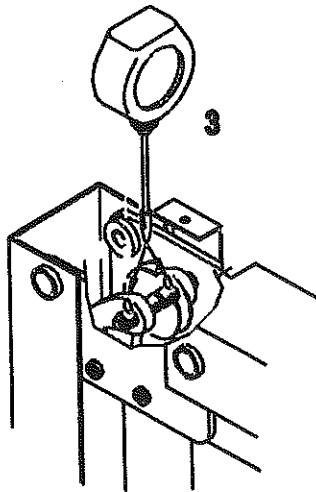
In addition to the here-above described verifications for a first level maintenance, a qualified technician from a Trophy dealer must perform the here-enclosed " Preventive Maintenance Procedure and Checks for Mechanical Wear".

**☛ The above maintenance procedure requires the services of a qualified technician from a Trophy dealer. In addition to the periodic maintenance, any deviation from the normal performance of the unit must be immediately reported to your dealer. In the meantime, it is recommended not to use the unit.**

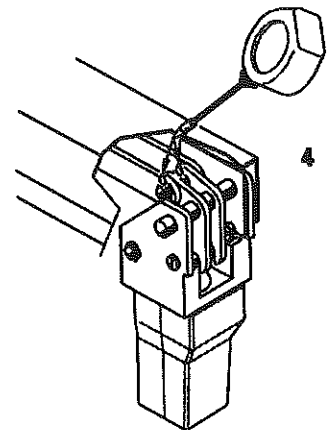
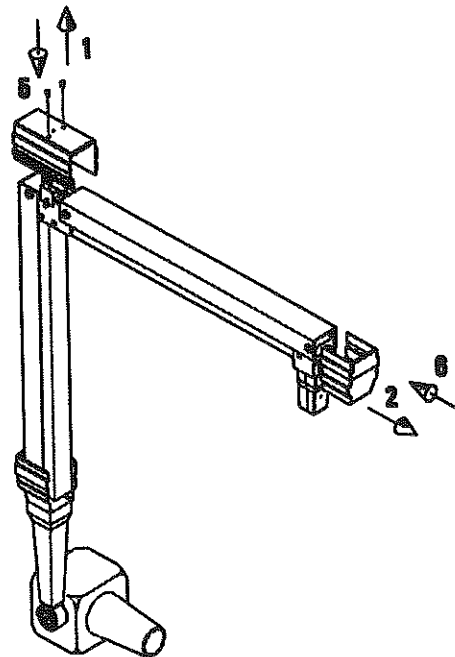
**PREVENTIVE MAINTENANCE PROCEDURE  
AND CHECKS FOR MECHANICAL WEAR  
(TO CARRY OUT EVERY 2 YEARS)**

**A. SCISSORS ARM GREASING (Before Nov 1995)**

The scissors arm greasing must be done every 2 years by your installer like show below.  
Grease require: ELF MOGLIA 220

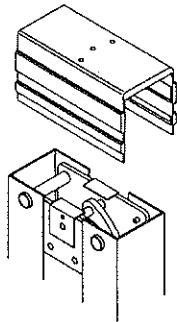


For Arms made  
before  
November 1995  
(Code JK)



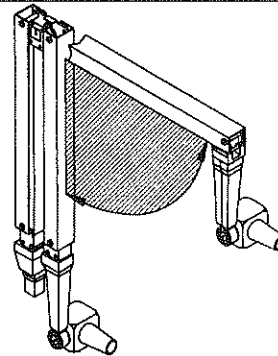
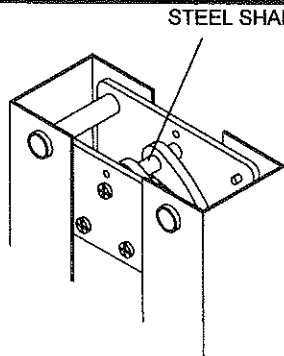
## B. CENTRAL STEEL SHAFT (FW032) WEAR

Remove the centre cover.



CAREFULLY PERFORM THE FOLLOWING CHECKS :

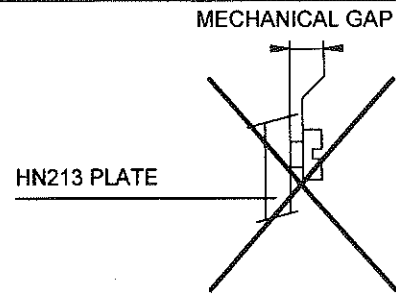
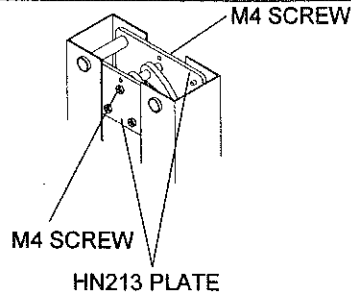
### 1/ MANIPULATE THE ARM TO CHECK THAT THE STEEL SHAFT DOES NOT ROTATE.



If this steel shaft rotates during the manipulation as here-above described on the drawing or if grating noise can be heard, the shafts of the arm show a wear that might eventually cause the device to fall.

**Replace the arm as soon as possible.**

**2/ CHECK THAT THE STEEL SHAFT'S TWO M4 SCREWS ARE TIGHTENED PROPERLY.**



The two screws **MUST** be properly tightened and **IN CONTACT WITH THE HN213 PLATE.**

Loose screws or a gap between the screws and the HN213 plates are signs of wear in the arm that might eventually cause the device to fall. In this case only:

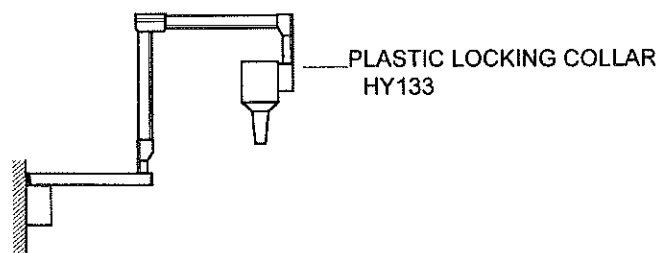
**Replace the arm as soon as possible.**

**C. SPRINGS BALANCE AND TENSION.**

The arm must be balanced throughout its movements. Adjust the springs as described in the installation manual.

**D. GENERATOR CONNECTOR WEAR.**

☞ Position the arm as shown.



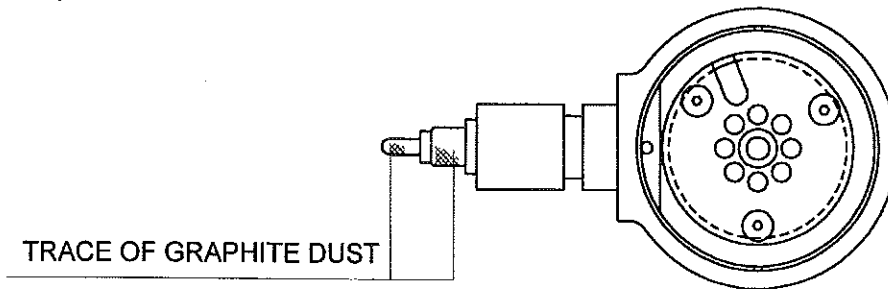
Do not use an other position of the arm

- ☞ Remove the plastic locking collar HY133
- ☞ Remove the generator.

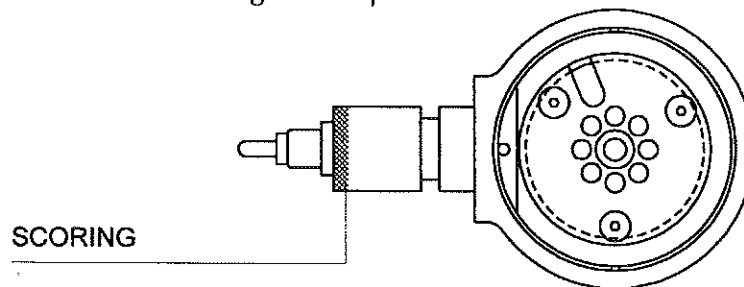
**Intra-Oral X-Ray Unit**  
**IRIX 708 - NOVELIX 6510 with CCX Digital Timer and Scissor Arm**

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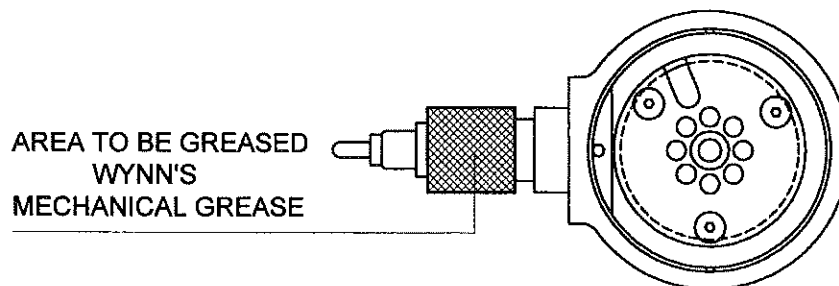
- ☞ If the generator cannot be removed, **replace the arm and the generator** . Otherwise, using alcohol, clean the contacts (especially traces of graphite dust) and the pivot.



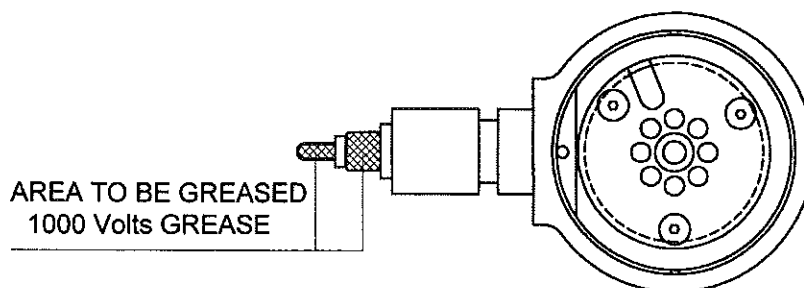
- ☞ Check that there is no scoring on the pivot.



- ☞ If there are traces of scoring, polish the pivot with fine glasspaper (180) until all traces disappear from the pivot.
- ☞ Lightly grease the pivot with a good quality mechanical grease such as *WYNN'S HP*.



- ☞ Lightly grease the contacts with a 1000 Volts grease (available from Trophy)

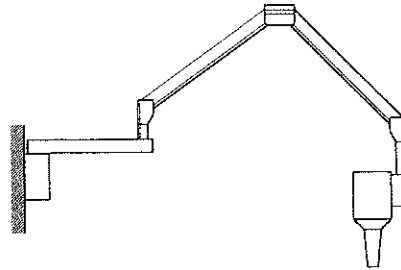


- ☞ Using alcohol, clean scrupulously the part of the arm which receives the pivot. Then reassemble the generator. Check that it rotates freely.

### E. ELECTRICAL CABLE CONDITION.

- ☞ Check the cable for cracks where the arm bends.
- ☞ Replace the cable if any anomaly, however slight, is found (Installation and Maintenance manual - page 35 - Procedure to change the generator power supply cable).

### F. HORIZONTAL EXTENSION ARM.



- ☞ Position the arm as shown. The half-extended arm must be **IMMOBILE** throughout horizontal travel.
- ☞ Maintaining the arm in the same position, place a water level on the extension arm to check that the arm does not dip during horizontal travel.
- ☞ In the event of an anomaly, remove the unit and proceed again to the full installation (as described in the Installation and Maintenance manual).

### G. WALL BRACKET FASTENING

- ☞ Extend the arm fully, moving it far as its stroke allows, and check that the wall bracket does not separate from the wall.
- ☞ If any movement is observed between the wall bracket and the wall (slip or separation), remove the unit and proceed again to the full installation (as described in the Installation and Maintenance manual).



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The IRIX 70 is a  device

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