

15014DLX – PORTABLE AUDIOMETER

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WARRANTY

This warranty is extended to the original purchaser of the MA39/40/41 Audiometer by Maico through the authorized distributor from whom it was purchased and covers defects in material and workmanship for a period of two years from date of delivery of the audiometer to the original purchaser.

If the MA39/40/41 audiometer contains a defect in material or workmanship, Maico, at its option will repair or replace the instrument at no charge except for transportation to and from the point of service. It is the purchaser's responsibility to return the audiometer to the Maico Special Instrument Distributor from whom it was purchased or directly to Maico after receiving authorization to return.

This warranty does not cover breakage or failure occasioned by tampering, misuse, carelessness, accident or modification. The warranty is void if the MA39/40/41 audiometer is repaired by other than an authorized Maico Special Instrument Service Center.

NOTE

Specifications in this manual were in effect at the time of printing. Maico Hearing Instruments, whose policy is one of continuing progress, reserves the right to discontinue or change specifications or design at any time without notice or incurring obligation.

WARNING

The Maico MA39/40/41 is designed to be used with a hospital grade outlet. Injury to personnel or damage to equipment can result when a three-prong to two-prong adapter is connected between the power plug and an AC outlet or extension cord.

1.0 SPECIFICATIONS

The MA39/40/41 meets all appropriate sections of ANSI S3.6-1969, Rev. 1989 and ISO 389-1975.

1.1 **MA39, MA40, and MA41 Specifications. (See additional specifications for MA40 and MA41).**

Frequency Accuracy: $\pm 3\%$ maximum of indicated frequency

Frequency and HL ranges:

FREQUENCY	AIR CONDUCTION HL RANGE
125Hz	-10 to +80 dB HL
250Hz	-10 to +100 dB HL
500Hz	-10 to +110 dB HL
750Hz	-10 to +110 dB HL
1000Hz	-10 to +110 dB HL
1500Hz	-10 to +110 dB HL
2000Hz	-10 to +110 dB HL
3000Hz	-10 to +110 dB HL
4000Hz	-10 to +110 dB HL
6000Hz	-10 to +110 dB HL
8000Hz	-10 to +110 dB HL

* +10 dB HL is available for 120 dB HL presentation via a momentary pushbutton switch on the MA40 and MA41 audiometers.

Attenuator linearity: ± 0.5 dB per 5 dB step, ± 3 dB overall

Distortion: 0.5% typical, 3% maximum

Sound pressure level 0 dB for calibrated phone

Calibration accuracy: ± 2 dB for other earphone

Pulsed stimulus: 2.5 pulses/second, 50% duty cycle

Rise/Fall time: 35 msec. Typical

Freq. Mod. Rate: $\pm 5\%$ sine wave modulation at 5Hz modulating rate

Dimensions: 12.5" (w) by 15.5" (d) by 6.25" (h)

Weight: 15 to 18 lbs with accessories

Case: Durable ABS housing

Electric power: 117 or 234 VAC $\pm 10\%$ 50-60 Hz

MA39 7 watts average, MA40 and MA41 10 watts average

1.2 MA40 and MA41 Narrow Band Noise and Bone Specifications.

The MA40 and MA41 meet all appropriate sections of ANSI S3.26-1981.

FREQUENCY 3dB POINTS	NARROW BAND HL RANGE	NARROW BAND HL RANGE	BONE CONDUCTION
125 Hz	125 ± 17 Hz	-10 to +70 dB HL	-----
250 Hz	250 ± 35 Hz	-10 to +90 dB HL	-10 to +40 dB HL
500 Hz	500 ± 70 Hz	-10 to +100 dB HL	-10 to +70 dB HL
750 Hz	750 ± 106 Hz	-10 to +100 dB HL	-10 to +70 dB HL
1000 Hz	1000 ± 140 Hz	-10 to +100 dB HL	-10 to +70 dB HL
1500 Hz	1500 ± 210 Hz	-10 to +100 dB HL	-10 to +70 dB HL
2000 Hz	2000 ± 280 Hz	-10 to +100 dB HL	-10 to +70 dB HL
3000 Hz	3000 ± 420 Hz	-10 to +100 dB HL	-10 to +70 dB HL
4000 Hz	4000 ± 560 Hz	-10 to +100 dB HL	-10 to +70 dB HL
6000 Hz	6000 ± 840 Hz	-10 to +100 dB HL	-----
8000 Hz	8000 ± 1120 Hz	-10 to +90 dB HL	-----

Rolloff is 12 dB per octave minimum; narrow band calibration is in effective masking.

Masking level attn: Variable intensity with a 5 dB step detent.

1.3 MA41 Speech Specifications

Speech air cond. cal.: 0 dB HL for a 0 VU signal corresponds to 19.5 dB SPL.

Speech air conduction

HL range: -10 to +100 dB HL; 5 dB steps; +2.5 dB push button

Speech input selector: Selects mic. or tape input via a pushbutton switch.

Speech gain adjustment: Gain control adjusts 40 dB range differences in speech signal Level.

Speech level indicator: VU meter with characteristics as defined by ANSI C16.5.

Microphone type: Electret condenser.

Tape input: Sensitivity: 50mV RMS 0 VU.
Frequency response: ± 3dB, 200 to 4000 Hz.
Distortion: 3% THD.

Speech noise range: -10 dB to 100 dB HL.

Monitor and talkback: Insert type, P/N 4700, or TDH-39, P/N 4682, headset optional. Optional electret talkback microphone, P/N 1021-162A.

1.4 Accessories Supplied

Description	MA39	MA40	MA41
Test Headset (TDH-39 Earphones, 10Ω)	*	*	*
B71 Bone Vibrator, Cord and Headband, 10Ω		*	*
Speech Microphone with Stand			*

1.5 Optional Accessories

Cat. No.	Description	MA39	MA40	MA41
4695	Audiocup Earphone Enclosures	*	*	*
2169	Patient Response Switch	*	*	*
4700	Insert Monitor Receiver Headset			*
4682	TDH-39 Monitor Receiver Headset			*
6606	MA39 Sound Room Kit (3 Patch Cords, Patient Response Switch)	*		
6607	MA40 Sound Room Kit (4 Patch Cords, Patient Response Switch)		*	
6608	MA41 Sound Room Kit (5 Patch Cords, Patient Response Switch, Talk Back Microphone, Insert Monitor Receiver Headset)			*

1.6 MA39, MA40, and MA41 Comparison of Features

Feature	MA39	MA40	MA41
Rugged case with handy storage compartment for accessories.	*	*	*
Light-touch push buttons with associated bright LED indication for function selection.	*	*	*
Large LED displays for frequency and HL settings.	*	*	*
125-8000 Hz (11 frequencies).	*	*	*
Frequency modulation (FM)-(Warble tone)	*	*	*
Electronic attenuator.	*	*	*
-10 to 110 dB HL mid-frequencies.	*	*	*
Quiet, tactile, dual present/interrupt switches with stimulus-on/stimulus-off select.	*	*	*
Electronic pulsing, 2.5 PPS.	*	*	*
Trimpot calibration for each frequency.	*	*	*
Patient response circuit with LED indicator (response switch, optional accessory).	*	*	*
Clickless attenuator – test signal momentarily turned off during level change.	*	*	*
B-71 Bone vibrator with trimpot calibration (250-4K Hz)		*	*
Narrow band masking (effective masking –10 dB HL to 100 dB HL mid-frequencies).		*	*
LED display of masking level.		*	*
120 dB HL with +10 dB button (mid-frequencies).		*	*
Separate speech microphone and tape inputs with independent level controls.			*
+2.5 dB HL push-button for speech testing.			*
Speech weighted noise in effective masking –10 dB to 100 dB HL.			*
VU meter for speech level monitoring.			*
Talk forward push button and level adjust control.			*
Talk back (optional sound room kit contains microphone).			*
Monitor circuit for microphone, tape stimulus and talk back circuit (optional monitor earphone).			*
Monaural sound field capability.			*

2.0 INTRODUCTION

Diagram

The Models MA39, MA40, and MA41 are precision instruments designed to permit simple, rapid and reliable hearing tests. Their application ranges from school testing programs, pre-employment examinations, monitoring audiometry for hearing conversation programs, to more elaborate diagnostic applications requiring air conduction, bone conduction, masking and speech testing capabilities. The three instruments provide all of the pure tone frequencies and full dynamic range specified by the American National Standards Institute S3.6 1969, revised 1989.

All three models utilize a full range of electronic attenuator (-10 dB HL to 110 dB HL mid frequencies) with all input/output switching and routing performed electronically by power MOS switching semiconductor devices. Large LED* numeric displays show selected frequency, HL intensity and masking HL intensity settings. Small individual LED's are used to show the selected function (see identification of controls illustration 6.0 for specific model). The models MA39, MA40, and MA41 retain the side-mounted controls for frequency and HL setting as well as the dual present/interrupt buttons so familiar to Maico audiometer users. All functions, actuators/push button controls, provide a tactile feedback to the operator whenever a function is selected or operated. In addition, a bright LED indicator is associated with the selected function.

Maico audiometers have been designed to meet the most vigorous of electrical safety standards and to provide years of reliable operation with a rugged durability that has become the trademark of Maico portable audiometers.

*Light Emitting Diode.

3.0 INSPECTION AND SET-UP

3.1 External Inspection

Your MA39/40/41 was carefully inspected and packed for shipping, however, it is a good practice to thoroughly inspect the outside of the shipping container for signs of damage. If any damage is noted after unpacking, notify your carrier immediately.

3.2 Unpacking

Open the top of the shipping carton and pull the foam packing from the top of the instrument. Carefully remove your MA39/40/41 from the shipping carton. Remove the plastic bag from the instrument and inspect the case for any damage. Notify the carrier immediately if any mechanical damage is noted. This will assure that a proper claim can be made. Save all packing material so the claim adjuster can inspect it as well. Notify Maico as soon as the adjuster has completed the inspection.

SAVE ALL THE ORIGINAL PACKING MATERIAL AND THE SHIPPING CONTAINER SO THE INSTRUMENT CAN BE WELL-PACKED IF IT NEEDS TO BE RETURNED FOR SERVICING OR CALIBRATION.

3.3 Setup of the Audiometer

The earphones are color-coded to eliminate the possibility of incorrect positioning.

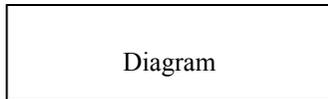
NOTE: The headset cord has a RED PLUG to identify the RIGHT EARPHONE CORD that inserts into the RIGHT PHONE JACK. The BLUE PLUG inserts into the LEFT PHONE JACK. The SUBJECT RESPONSE CORD inserts into the SUBJECT RESPONSE JACK (See section 3.6 for a MA39 or section 3.8 for a MA40 or section 3.10 for MA41).

3.4 Sound Room Installation

If the MA39, MA40, or MA41 is used in conjunction with a sound room, patch cords are needed to connect the audiometer to the sound booth patch panel. The MA41 also requires a talkback microphone and monitor headset (see section 1.5 for sound room kit part numbers).

If you have any questions while installing your MA39, MA40, or MA41 contact your authorized Maico Special Instrument Distributor.

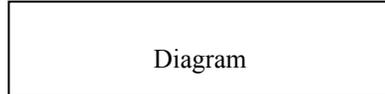
3.5 MA39 Front Panel Layout



Functions, Controls, and Display Descriptions

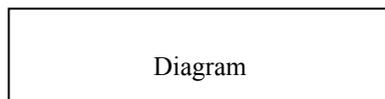
F1	Power On / Off Switch	D1	LED Indicator of Subject Response using optional Subject Response Switch
F2	Stimulus Present / Interrupt Switch (Qty 2).	D2	LED Indicator of Stimulus being presented.
F3	Left / Right Earphone Selector.	D3	LED Indicator of Active Test Earphone.
F4	Stimulus On (Interrupt), Stimulus Off (Present).	D4	LED Indicator of Stimulus On (Interrupt) or Stimulus Off (Present).
F5	Automatic Pulsing	D5	LED Indicator of Automatic Pulsing.
F6	Frequency Modulation (FM, Warble Tone).	D6	LED Indicator of FM (Warble Tone) On.
C1	Frequency Select Control Dial.	D7	LED Readout of Frequency Selected.
C2	Intensity Control Dial (HL).	D8	LED Readout of Intensity Selected, Display is Blank if Maximum Output for Selected Frequency is Exceeded.

3.6 MA39 Rear Panel Connections



Function	Description
J1	Left Earphone Jack (Blue Plug).
J2	Right Earphone Jack (Red Plug).
J3	Subject Response Switch Jack.

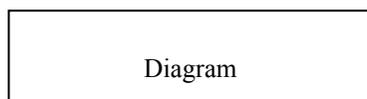
3.7 MA40 Front Panel Layout



Functions, Controls and Display Descriptions

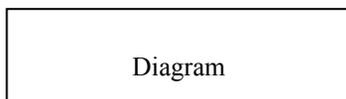
F1	Power On / Off Switch	D1	LED Indicator of Subject Response using optional Subject Response Switch.
F2	Stimulus Present / Interrupt Switch (Qty 2).	D2	LED Indicator when Stimulus is being presented.
F3	Left / Right Earphone Selector.	D3	LED Indicators of active Test Earphone.
F4	Stimulus On (Interrupt), Stimulus Off (Present).	D4	LED Indicators of Stimulus On (Interrupt) or Stimulus Off (Present).
F5	Automatic Pulsing.	D5	LED Indicator of Automatic Pulsing.
F6	Frequency Modulation (FM, Warble Tone).	D6	LED Indicator of FM (Warble Tone) On.
F7	Test Signal to Earphone or Bone Vibrator.	D7	LED Indicator of Active Transducer, either Earphone or Bone Vibrator.
F8	+10 dB Switch (Intensity dial C2 must be at 100 dB or higher for +10 dB increase for frequencies 750 Hz through 4000 Hz).	D8	LED Indicator of +1- dB Application (See F8).
C1	Frequency Select Control Dial.	D9	LED Readout of Frequency Selected.
C2	Intensity Control Dial (HL).	D10	LED Readout of Intensity Selected, Display is Blank if Maximum Output for Selected Frequency is Exceeded.
C3	Masking Intensity Control Dial (Narrow Band Noise).	D11	LED Readout of Masking Intensity Selected, Display is Blank if Maximum Output for Selected Frequency is Exceeded.

3.8 MA40 Rear Panel Connections



Function	Description
J1	Left Earphone Jack (Blue Plug).
J2	Right Earphone Jack (Red Plug).
J3	Subject Response Switch Jack.
J4	Bone Vibrator Jack (B71 Bone Vibrator).

3.9 MA41 Front Panel Layout



F1	Power On / Off Switch.	D1	LED Indicator of Subject Response using optional Subject Response Switch.
F2	Stimulus Present / Interrupt Switch.	D2	LED Indicator when Stimulus is being Presented.
F3	Left / right Earphone Selector.	D3	LED Indicators of Active Test Earphone or Masking for Bone.
F4	Stimulus On (Interrupt), Stimulus Off (Present).	D4	LED Indicator of Stimulus On (Interrupt) or Off (Present).
F5	Automatic Pulsing.	D5	LED Indicator of Automatic Pulsing.
F6	Frequency Modulation (FM, Warble Tone).	D6	LED Indicator of FM (Warble Tone) On.
F7	Test Signal to Earphone or Bone Vibrator.	D7	LED Indicator of Earphone or Bone Vibrator.
F8	+10 dB Switch (Intensity Dial C2 must be at 100 dB or higher for +10 dB increase for frequencies 750 Hz through 4000 Hz.	D8	LED Indicator of +10 dB Application (See F8).
F9	Tone Stimulus Select.	D9	LED Indicator of Tone Stimulus Selected.
F10	Microphone / Tape Select Switch.	D10	LED Indicators of Tape or Microphone Stimulus Selected.
F11	Speaker Select	D11	LED Indicator of Speaker Selection.
F12	+2.5 dB Speech Test Signal Select.	D12	LED Indicator of +2.5 dB HL Application (see F12).
F13	Talk Forward Select.	D13	LED Indicator of Talk Forward Function.
C1	Frequency Select Control Dial.	D14	LED Readout of Frequency Selected.
C2	Intensity Control Dial (HL).	D15	LED Readout of Intensity Selected, Display is Blank if Maximum Output for Selected Frequency is Exceeded.
C3	Masking Intensity Control Dial (Narrow Band Noise).	D16	LED Readout of Masking Intensity Level Selected, Display is Blank if Maximum Output for Selected Frequency is Exceeded.
C4	Test Microphone Level Control.	M1	Speech VU Meter to Determine Proper Levels.
C5	Tape Level Control.		
C6	Talk Forward Level Control.		
C7	Talk Back Level Control.		

3.10 MA41 Rear Panel Connections and Controls

Function	Description
C8	Monitor Level Control.
J1	Left Earphone Jack (Blue Plug).
J2	Right Earphone Jack (Red Plug).
J3	Subject Response Switch Plug.
J4	Bone Vibrator Jack (B71 Bone Vibrator).
J5	Output Jack for Sound Field Amplifier and/or Speaker.
J6	Monitor Output Jack for Optional Monitor Earphone.
J7	Tape / CD Player Input Jack.
J8	Speech (Test) Microphone Jack.
J9	Talk Back (Subject) Microphone Jack.

4.0 AUDIOMETER OPERATION of the MA39, MA40, and MA41

4.1 Preliminary

4.1.1 Power connections.

Before starting any testing, ensure that the power cord is properly routed through the notch in the side of the carrying case. The power plug must be inserted into a compatible power receptacle, which has proper grounding.

4.1.2 Accessory Connections.

Check for correct connection of test headphones and other accessories to the audiometer.

4.1.3 Sound Room.

When a sound room is used with the audiometer, check the patch cord connections to the outside jack panel. Check to see that the headphones, response switch and other accessories are properly connected to the inside jack panel.

4.1.4 Care of Accessories.

Always handle earphones and other accessories with care. Never drop them or permit them to be knocked together. Mechanical shock may change their electrical and operating characteristics such that the instrument may need to be recalibrated or the parts may need to be replaced.

4.2 Audiometric Testing

4.2.1 Instruction to the Person Being Tested.

The operator should place the person to be tested at ease concerning the test. The operator should explain the purpose of the test and what kind of sound or sounds will be heard. An unvarying and uniform explanation to the person being tested will provide test results that are consistently high in reliability. An explanation for pure tone or baseline audiometry might be expressed as follows: "I am going to place these headphones on your ears. You will hear a whistle or beeping sound,

which may be loud or soft. Whenever you hear or think you hear one of these sounds, raise your hand (or press the response switch button). Lower your hand (or release the button) when you no longer hear the sound. Remember to listen carefully for the sound because some will be loud and some very soft. Remember, raise your hand when you hear the sound (or press the response switch button) and lower your hand (or release the button) when you do not.”

4.2.2 Preparing for the Test.

Remember to check the following before placing the earphones on the person to be tested. Proper placement for the headphones on the ears to be tested is essential to achieving good test results.

- Eliminate any obstructions that could interfere with placement of the earphone cushion on the ear (i.e., hair, earrings, eyeglasses, hearing aids, etc.)
- Adjust the headband so that the earphone cushions are centered over the ears and the headband rests firmly over the center of the head. The earphone cushion will put a firm pressure on both ears.

4.2.3 Test Environment and Ambient Noise.

Excessive sounds or noise in the chosen test environment can produce a masking effect and therefore affect the test results. The selected site should be away from conversations, noisy business equipment, hallway traffic and other noise producing environments. The lower test frequencies are most affected by these types of noises.

In some instances it may be necessary to acoustically treat the test site in order to achieve the necessary quietness for testing purposes. Commercially available “sound rooms”, which are designed to provide an acoustically treated testing environment, are recommended where baseline or threshold audiometry is required. These rooms are available in a variety of sizes and isolation capabilities. Consult your Maico Hearing Instrument Distributor for the type of testing you will need.

Requirements for Industrial Baseline Audiometric Test Environment.

Octave Band Center Frequency	500	1000	2000	3000	4000
SPL dB	40	40	47	57	62

Maximum allowable octave band sound pressure level for Audiometric Test rooms. OSHA August 21, 1981.

4.2.4 General Testing Capability.

TEST TYPE	MA39	MA40	MA41
Pure tone air conduction.	*	*	*
Pure tone air conduction with narrow band masking.		*	*
Pure tone air and bone conduction with narrow band masking.		*	*
Speech air conduction from microphone, tape or CD player with speech weighted noise masking available.			*
Speech bone conduction from microphone, tape or CD player with speech weighted noise masking available.			*
Speech sound field (with optional amplifier and speaker).			*

4.2.5 Hearing Test Administration.

The MA39, MA40, and MA41 audiometers do not require special operating techniques. The test should be presented as described in “Introduction to Audiometry” by R.F. Naunton, MD or in several good textbooks on the subject (or as described in a number of standards published by various organization, i.e. ANSI, IEC, ISO, etc.).

5.0 REPAIR

By its nature, an audiometer is a precision instrument, which should only be serviced by a factory authorized Maico Hearing Instrument Service Center. Local television and electronic shops do not have the laboratory-grade acoustical calibration equipment required to assure that the audiometer headset system is performing properly.

6.0 RECALIBRATION

The length of time that an audiometer should be operated before recalibration varies depending upon the treatment given the instrument and its headset. It is recommended that the instrument have a laboratory recalibration at least every year. Since rough handling can easily cause calibration errors, it is advisable to establish a biological check as soon as you receive the instrument. This can be done as follows:

- (a) Make several careful tests of your own hearing, recording the results properly on the audiogram charts provided with the instrument.
- (b) Make similar tests on several young adults on whom you will be able to make subsequent retests, recording the test results on audiogram cards.
- (c) File these audiogram charts where they will be readily available for comparison with subsequent retests.

Should you feel at any later date that the audiometer's calibration might be in error, proceed to make retests on yourself and the same young adults on whom you made audiograms previously. If all retests show changes of 10 dB or more in the same direction at the same frequencies, calibration is probably in error. If repair and/or calibration are needed, be sure the work is done by a Maico Hearing Instrument Service Center. This assures the use of quality materials by trained and experienced technicians using accurate and reliable equipment.

Maico Hearing Instrument Service Centers are located in major cities throughout the world. To minimize shipping charges and delay, inquire of the factory for the location of the center servicing your geographic location. Send your inquiry to: Maico Hearing Instruments, 9575 West 76th Street, Minneapolis, Minnesota 55344, or call (612) 835-4400, or fax (612) 835-2759.

7.0 PREVENTATIVE MAINTENANCE

To maximize the service life of your audiometer and accessory equipment, we suggest the following:

- (a) Turn the instrument off overnight.
- (b) Dust the audiometer occasionally with a soft dry cloth.
- (c) Wipe the headset cords and ear cushions occasionally with a cloth dampened with warm water (not dripping wet). Dry with a soft cloth.
- (d) Leave the headset, bone vibrator, and microphone permanently connected to the audiometer to minimize straining the connections. It is not necessary to disconnect any of these items while performing audiometric tests. The signal transfer are accomplished by manipulating the control panel switches. Should it be necessary to unplug these items, always grasp the barrel of the connecting plugs, never pull the cords.
- (e) Close the cover of the audiometer case at the end of each day to minimize dust collection.
- (f) Avoid sharply bending or twisting any of the connecting cords. Although they are designed to be highly flexible, rough treatment may cause damage. A broken power cord will cause intermittent operation or total inoperability of the audiometer. Other broken or defective cords can cause crackling noise, intermittent or weak operation in either the bone vibrator or air conduction headset and microphone. Headset and bone vibrator cords may be replaced without needing to be recalibrated.
- (g) This Maico audiometer has been designed to meet the most exacting electrical safety requirements for patient care equipment.
- (h) The hospital grade 117 volt AC three prong plug should be inserted into a mating three prong hospital grade receptacle that is properly grounded. This will ensure reliable and safe operation of this instrument. The use of a three prong to two-prong adapter should be avoided and is not recommended.

Note:

To operate the audiometer on voltages other than 117 volt 50-60 Hz, please consult your authorized Maico Hearing Instrument Distributor to ensure the audiometer is wired correctly or has the proper transformer for the desired operating voltage.

8.0 SHIPPING INSTRUCTIONS

Should it be necessary for you to return the audiometer for repair or recalibration, be sure to return all accessories as well. This is essential because the audiometer headset and bone vibrator must be together for calibration. They cannot be calibrated separately. By the same token, if the associated headset is being returned for repair, it is necessary to return the audiometer. The only exception to this requirement is the replacement of the headset cords, which can be done without affecting the calibration.

If more than one audiometer is in use, see that the serial number on the back panel of the audiometer and the serial number on the headset cord are identical.

Pack the audiometer carefully in either the original shipping carton or in a strong cardboard box with at least two inches of clearance for packing material on each side of the audiometer, in the following manner:

- (a) Wrap the headset, bone vibrator and microphone separately, with care, in several layers of soft paper, cloth or plastic bubble packaging material. Place in the accessory storage compartment of your portable audiometer.
- (b) Enclose and explanatory letter with the audiometer. Describe the service you require and carefully detail any operational problems. Be sure to include your full return address and phone number so you may be called if needed. Do not list your address as a P.O. Box number, our shipper does not deliver to P.O. Boxes.

NOTE: The audiometer is always recalibrated with its headset and bone vibrator after repair, to ensure correct system operation.

- (c) Place the audiometer in the original shipping carton using the foam supports supplied. Shipping cartons are available from distributors for a modest charge.
- (d) Insure properly and ship by UPS, Federal Express or Airborne to your Maico Hearing Instrument Distributor Service Center. Contact Maico for the name and address of the location nearest you. NOTE: Service will be provided by the Authorized Maico Distributor from whom you purchased the instrument.

Maico Hearing Instruments Service Centers are located in major cities throughout the world. To minimize shipping charges and delay, inquire for the factory for the location of the center servicing your geographic location. Send your inquiry to: Maico Diagnostics, 9675 W. 76th Street, Eden Prairie, Minnesota 55344, or call (952) 941-4200, or fax (952) 903-4200.