

# DYNAMO AM/FM BAND RADIO

## Model 94670

### ASSEMBLY & OPERATING INSTRUCTIONS



Due to continuing improvement, actual product may differ slightly from the product described herein.



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For technical questions and replacement parts please call 1-800-444-3353.

THANK YOU for choosing a **HARBOR FREIGHT TOOLS** product. For future reference, please complete the owner's record below:

**Model** \_\_\_\_\_ **Serial No.** \_\_\_\_\_ **Purchase Date** \_\_\_\_\_

SAVE THE RECEIPT, WARRANTY AND THESE INSTRUCTIONS. It is important that you read the entire manual to become familiar with the unit BEFORE you begin assembly.

### Technical Specifications

Batteries:	Built-in rechargeable Ni-MH Back up powered by (3) "AA" (not included)
Overall Dimensions:	7-3/4" L X 2-1/4" W X 4-1/2" H
Weight:	1.2 Lbs.
Bands:	AM-(530-1700), FM-(88-108 MHz)
AD Adaptor:	120V/60Hz
Cord Length:	6'
Crank:	1 minute of turning=30 minutes of listening time
Also includes:	Built in LED flashlight, chrome plated brass antenna, LED panel, earphone jack

UL approved



*READ ALL INSTRUCTIONS BEFORE USING THIS PRODUCT!*

### Safety Warnings and Precautions

**WARNING:** When using product, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

**Read all instructions before using this product!**

#### GENERAL SAFETY RULES

#### WARNING!

**READ AND UNDERSTAND ALL INSTRUCTIONS**  
Failure to follow all instructions listed below may result in  
electric shock, fire, and/or serious injury.  
**SAVE THESE INSTRUCTIONS**

#### WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate the Radio in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Electrical products create sparks which may ignite the dust or fumes.

## ELECTRICAL SAFETY

3. **Grounded products must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If a grounded product should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
4. **Double insulated products are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation  eliminates the need for the three wire grounded power cord and grounded power supply system.
5. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
6. **Do not expose the Radio to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **Do not abuse the Power Cord. Never use the Power Cord to carry the Radio or to pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
8. **When operating the Radio outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

## PERSONAL SAFETY

9. **Stay alert. Watch what you are doing, and use common sense when operating the Radio. Do not operate the Radio while tired or under the influence of drugs, alcohol, or medication.**
10. **Store the Radio out of reach of children and other untrained persons.** Electrical products are dangerous in the hands of untrained users.

## TOOL USE AND CARE

11. **Do not use the Radio if the Power Switch does not turn it on or off.** Any appliance that cannot be controlled with the Power Switch is dangerous and must be replaced.
12. **Disconnect the Power Cord before making any adjustments, changing batteries, or storing the Radio.** Such preventive safety measures reduce the risk of turning on the product accidentally.

## SERVICE

13. **Radio service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.

14. **When servicing the Radio, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

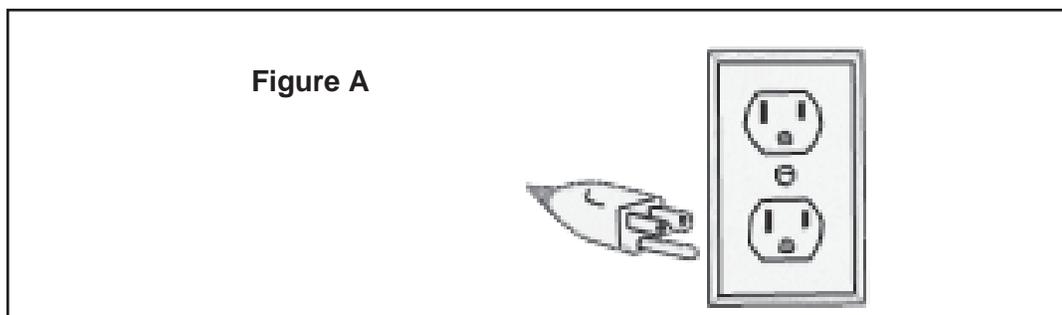
### GROUNDING

#### WARNING!

**Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the Buffer. Never remove the grounding prong from the plug. Do not use the Buffer if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.**

### GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the Radio should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the Radio’s grounding system and must never be attached to an electrically “live” terminal. **(See Figure A.)**
3. A grounded appliance must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. **(See Figure A.)**

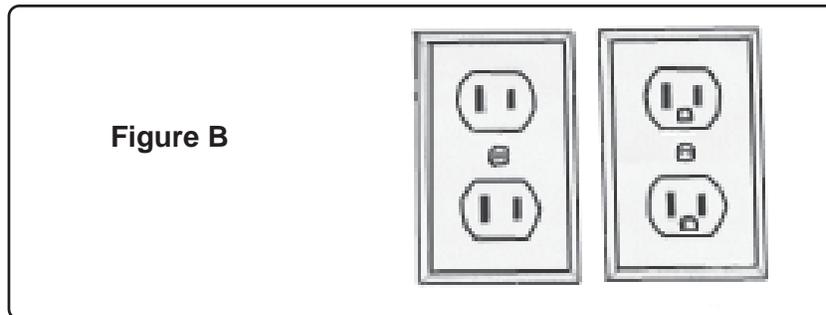


### DOUBLE INSULATED APPLIANCES: APPLIANCES WITH TWO PRONG PLUGS

**Note: The AM/FM Band Radio has a two prong plug.**

1. Appliances marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. **(See Figure B.)**

2. Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration. **(See Figure B.)**



### EXTENSION CORDS

1. ***Grounded*** appliances require a three wire extension cord. ***Double Insulated*** products can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Figure C, next page.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Figure C.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Figure C.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Figure C.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.
7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged cord or have it repaired by a qualified electrician before using it.
8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

### Specific Safety Rules for the AM/FM Band Radio

1. **Supervise children when they are using the Radio.**
2. **Use only batteries of the type recommended-size “AA”.**
3. **Do not mix old and new batteries.** Do not use different types of batteries; do not use rechargeable and alkaline batteries.
4. **Remove batteries if the Radio is not used for a long period of time.**
5. **Dispose of old batteries properly.** Make certain to follow all local laws and restrictions for proper disposal.

**Figure C**

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	1	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

\* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

**SYMBOLOLOGY**

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
<b>V</b> ~	Volts Alternating Current
<b>A</b>	Amperes
$n_o$ xxxx/min.	No Load Revolutions Per Minute (RPM)

6. **Do not use the Radio in places that are extremely hot, extremely cold, abnormally dusty or excessively humid.** Avoid using or storing the Radio in parked cars, in direct sunlight, or near heat sources such as heaters.
7. **People with pacemakers should consult their physician(s) before using this product.** Electromagnetic fields in close proximity to a heart pacemaker could cause interference to or failure of the pacemaker.

**Note:** Performance of this tool (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

**Warning:** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

### Unpacking

When unpacking your AM/FM Band Radio, check to make sure that all parts listed in the parts list on page 10 are included. If any parts are missing or broken, please call **HARBOR FREIGHT TOOLS** at **1-800-444-3353**. It is important that you read the entire manual to become familiar with the product BEFORE you operate and use the Radio.

### Assembly

Your Radio comes completely assembled. The only assembly required is installation of the back up batteries.

#### Installing the Back Up Batteries

1. Remove the Battery Cover (11)-see Figure 1.
2. Insert two "AA" Batteries as marked on the inside of the battery compartment.
3. Set the Battery Selector Knob to BATTERY-see Figure 2.

### Operation

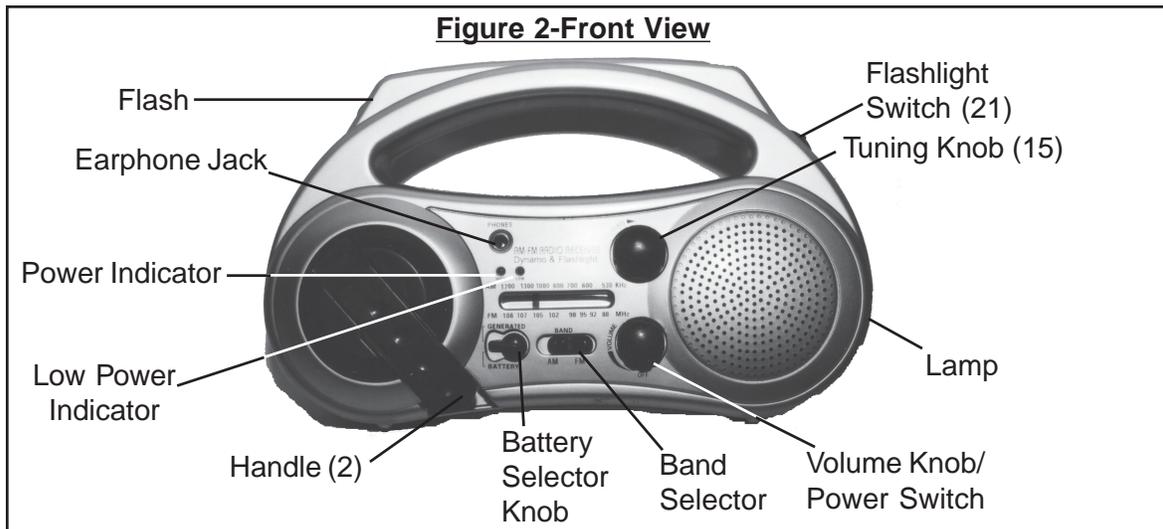
#### Using the Built-In Rechargeable Batteries

1. Set the Battery Selector Knob to "Generated".
2. Pull out the Handle-see Figure 2.
3. To charge the Radio, turn the Handle rapidly clockwise. Note that turning the Handle for one minute will give you about 30 minutes of listening time.
4. Note that when turning the Handle to recharge the batteries, if the radio is on, noise interference may occur.
5. **The Handle must be turned rapidly in either direction to fully and efficiently recharge the batteries.**
6. The rechargeable Ni-MH batteries can be used about 300 times.
7. To maintain optimal battery life, discharge the batteries completely before recharging.
8. **Only recharge the internal batteries when the "Low Battery Indicator Light" comes on-see Figure 2.**

**Figure 1-Rear View**



**Figure 2-Front View**



**Using the Flashlight/Lamp**

1. Set the Flashlight Switch (21) to FLASH to turn on the Flashlight.
2. To turn on the Lamp, set the Flashlight Switch to TORCH.
3. If neither the Flashlight nor the Lamp are being used, set the Flashlight Switch to OFF.

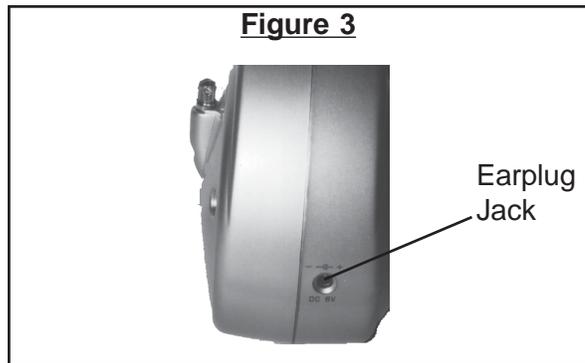
**Setting the Band Selector-AM/FM**

**Turning the Radio On/Off**

1. Turn the Volume Knob (16) clockwise to turn the Radio "ON" and to adjust to the desired volume level. To turn "OFF", turn the Volume Knob (16) counterclockwise until a click is heard.
2. Move the Band Knob to FM or AM.
3. Turn the Tuning Knob (15) to the desired radio station.

**Using the Adaptor**

1. Plug the Adaptor into the Jack located on the side of the Radio-see Figure 3. Plug into a electrical socket. Disconnect before using Radio.



**Maintenance and Cleaning**

1. Make certain that the On/Off Switch (16) is in the OFF position and that the Radio is unplugged from its power source before performing any inspection, maintenance or cleaning.
2. Use a soft cloth to clean the radio. Use only water or a mild detergent to clean the Radio housing.

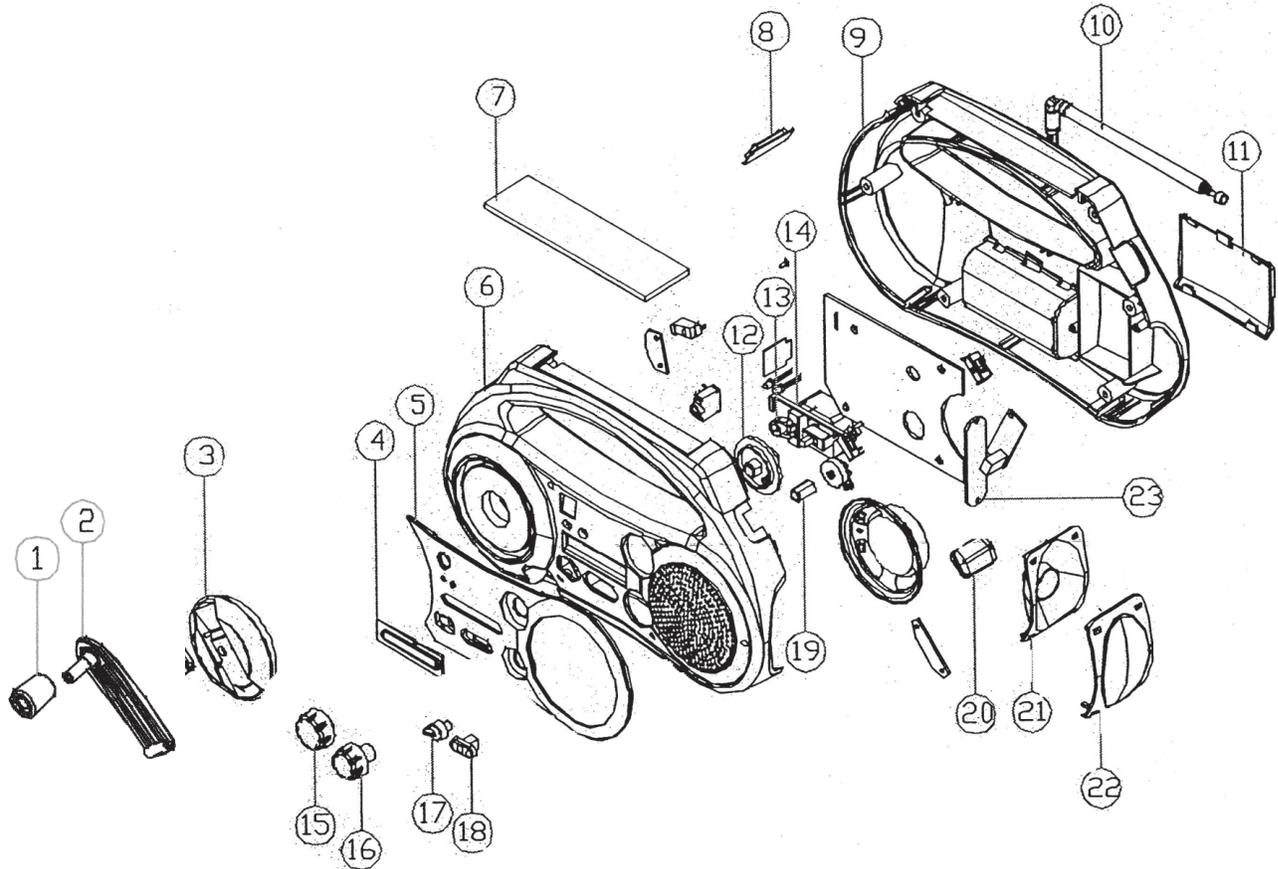
**PLEASE READ THE FOLLOWING CAREFULLY**

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**Parts List**

<b>Part #</b>	<b>Description</b>	<b>Part #</b>	<b>Description</b>
1	Handle Cover	13	Function Switch Bracket
2	Handle	14	Pointer
3	Turntable	15	Tuning Button
4	Band Display Cover	16	Volume Button
5	Decorated Panel	17	Function Switch
6	Housing	18	Band Control
7	Solar Energy Board	19	Volume Button Bracket
8	Flashing Lens	20	Light Switch
9	Bottom Housing	21	LED
10	Antenna	22	Lens
11	Battery Cover	23	Rechargeable Patch
12	Tuning Button Bracket		

## Parts and Assembly Diagram



Note: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

# Wiring Diagram

