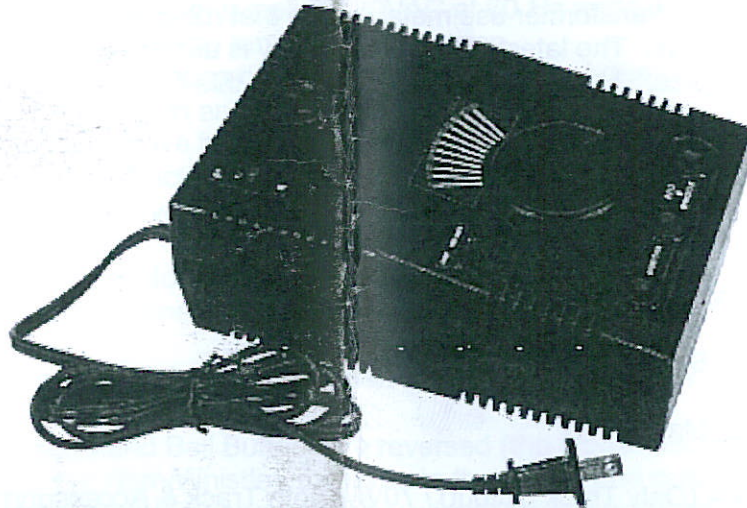


ATLAS O 80 WATT AC TRANSFORMER

Item #1000080

INSTALLATION AND OPERATING INSTRUCTIONS



HOBBY TRANSFORMER CAUTION – ELECTRICALLY OPERATED PRODUCT

**NOT RECOMMENDED FOR CHILDREN UNDER 12
YEARS OF AGE. AS WITH ALL ELECTRIC PRODUCTS,
PRECAUTIONS SHOULD BE OBSERVED DURING HANDLING
AND USE TO PREVENT ELECTRIC SHOCK.**

**TO PARENT: IT IS RECOMMENDED THAT THIS HOBBY TRANSFORMER BE PERIODICALLY
EXAMINED FOR CONDITIONS THAT MAY RESULT IN THE RISK OF FIRE, ELECTRIC
SHOCK, OR INJURY TO PERSONS (SUCH AS DAMAGE TO THE OUTPUT CORD, BLADES,
HOUSING, OR OTHER PARTS).**

**IN AN EVENT OF SUCH CONDITIONS, THE TRANSFORMER SHOULD NOT BE USED
UNTIL PROPERLY REPAIRED.**

**PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE
CONNECTING THIS TRANSFORMER TO YOUR LAYOUT.**

ATLAS O, LLC

378 Florence Ave.

Hillside, NJ 07205

USA

908-687-9590



Limited Warranty

This transformer is warranted for a period of two (2) years from the date of purchase against defects in material and/or workmanship. Any warranted transformer received within two years of the date of purchase will be repaired or replaced (at Atlas O's option) without charge for parts or labor. Please send copy of dated receipt. Defects due to dropping, misuse, improper maintenance, and/or abuse are not covered by the warranty. Transportation costs are not covered by this warranty. Items that have been disassembled by the modeler or anyone other than an Atlas O repair person are not covered by the warranty. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

Atlas O, LLC Repair Policy

If this transformer fails during the warranty period, please call the Atlas O Customer Service Department at 908-687-9590 to receive a Return Authorization Number (RAN). Carefully pack the assembled item in its original carton. Include a copy of the dated sales receipt and a letter explaining the problem that you are having. All these items should be placed into a larger outer carton surrounded by supportive material, insured and returned via UPS or US mail to

**Atlas O, LLC, Attn: Repair Dept.
378 Florence Avenue
Hillside, NJ 07205**

- Please include a brief explanation of the problem along with your name, return address, daytime telephone number and email address.
- Warranty* repairs must include a copy of the hobby store receipt
- Make sure that your shipment can be tracked by the carrier you use.
- All items will be logged in by the date received, and will be processed in the order they are received.
- Non-warranty repairs will be processed upon customer's approval of repair cost. If Atlas O cannot obtain approval within 30 days of the item's receipt, the un-repaired item will be automatically returned to the customer.
- Customers should allow 4-6 weeks for repair.

INTRODUCTION

The Atlas O #1000080 80 watt AC transformer is one of the most advanced power supplies for small to medium sized layouts that is available today. Similar to the classic O gauge transformers of years past, the variable AC track and accessory outputs of this transformer use metal wipers that rub directly on the transformer secondary winding to select the desired voltage. The latest electronic circuitry is used to activate the horn or whistle and bell in your sound-equipped locomotives. Unlike postwar transformers, this horn/whistle and bell circuitry does not slow down locomotives when it is activated.

SPECIFICATIONS

Input: 120 VAC, 60 Hz, 0.8 amps (full load)

Track Output: 0-18 VAC, Max. 80VA

Accessory Output: 6-16 VAC, Max. 30VA

Maximum Total Output: 80 VA (Only Track Output) / 70VA (Both Track & Accessory)

INSTALLATION

For best performance, it is recommended that the following gauges of insulated stranded wire be used to make all connections to the four transformer terminals on the rear.

Track Power: 16 gauge

Accessory Output: 20 gauge for low power accessories (use 18 to 16 gauge for higher power or multiple accessories)

Connect the wires from your layout to the screw terminals on the rear of the transformer as follows:

1. **Left-most terminal (A):** wire from the center rail of your layout
2. **Second terminal from left (U):** wire from the outside rails of your layout
3. **Third terminal from left (U):** wire from the common leads of your accessories
4. **Right-most terminal (B):** wire from the hot leads of your accessories

If you are connecting a wire directly to a terminal on the transformer, strip about 3/8 "of insulation from the end of the wire and bend the wire into a "U" shape. Loosen the screw on the terminal so that you can slip the U-shaped end of the wire under the head of the screw. Put the wire around the screw so that the wire goes around the terminal screw in a clockwise direction from the end of the insulated part of the wire to the end of the bare wire. Tighten the screw completely, but make sure that there are no loose strands of wire that can touch another screw terminal. Alternatively, you can strip approximately 3/16" from the wire and then crimp or solder on a spade terminal lug which may be purchased from an electrical supply house, hardware store, or home center.

OPERATION

1. Turn the **Power Switch** on the top of the transformer to its OFF position, and rotate the Track and Accessory Voltage Controls counterclockwise to their leftmost positions.
2. Plug the transformer into a wall outlet that supplies 120VAC at 60 Hz and turn the power switch on. The **Green Power LED** will light whenever you turn the AC power on.
3. Increase the speed of your train by rotating the **Track Voltage Control** (the large knob near the bottom of the transformer) in a clockwise direction and vice versa.
4. Change the direction of your locomotive by pushing the **Direction button** at the bottom left of the transformer. When you push the Direction button repeatedly to control an Atlas O locomotive, the reversing unit in the locomotive will cycle through the states (Forward, Neutral, Reverse, Neutral, Forward, Neutral, etc).
5. Blow the horn or whistle by pushing down and holding the **Horn/Whistle Button** at the bottom center until the horn or whistle starts to sound. Keep this button depressed until the horn or whistle has operated for as long as you wish.
6. Press the **Bell Button** (at the bottom right) once to start the bell ringing. Press this Bell Button a second time to turn the bell off.
7. If the actions of the Horn/Whistle and Bell Buttons are reversed (the Horn/Whistle Button operates the bell, and the Bell Button operates the Horn/Whistle), the wires to the center and outside rails of the track are reversed. To correct this problem, interchange the *track wires* going to the A and U terminals.
8. If the **Red Overload LED** is illuminated, excessive power is being drawn from the transformer, and the built-in circuit breaker has disconnected your layout from the transformer. If the Red LED is lit, turn off the Power Switch and turn down the Track Voltage Control to its minimum position. (If the short circuit is in your accessory wiring, turn down the Accessory Voltage Control instead.) Then identify and correct the cause of the short which is most likely to be a derailed car or locomotive. Turn AC power back on and gradually increase the Track Voltage Control to its normal position. If the layout is now operating properly, you have successfully corrected whatever problem caused the short circuit.
9. Increase the voltage supplied to your accessories by rotating the **Accessory Voltage Control** (the small knob near the top of the transformer) in a clockwise direction and vice versa. See the instruction manuals for your accessories to determine the proper voltage range of those accessories. The range of the accessory output voltage is 7 to 16 volts. When the Accessory Voltage Control is set to its center position, the accessory voltage is about 11 volts.

SAFETY PRECAUTIONS

1. This device is not recommended for children under twelve years of age.
2. Do not use this device for any purpose other than operating model trains.
3. Follow carefully the installation instructions in this manual when you connect the transformer to your layout.
4. Operate the Atlas O 80 watt transformer only from a 120 volt 60 Hz AC power supply.
5. Do not use the transformer if it has a damaged case, plug, or cord.
6. Do not use this transformer outdoors or any place where water is present.
7. Do not disassemble the transformer. There are no user-serviceable parts inside. Instead return it to Atlas O for service.
8. If the transformer has gotten wet or you find other potential hazards, have it inspected by Atlas O before using it again.
9. Never put anything into the ventilation slots on the transformer case. Obstructing these slots may cause the transformer to overheat and damage sensitive electronic components.
10. When the transformer is not being used, always turn off the AC power switch and unplug the transformer from its AC power source.
11. Do not operate unattended the layout to which this transformer is connected.