

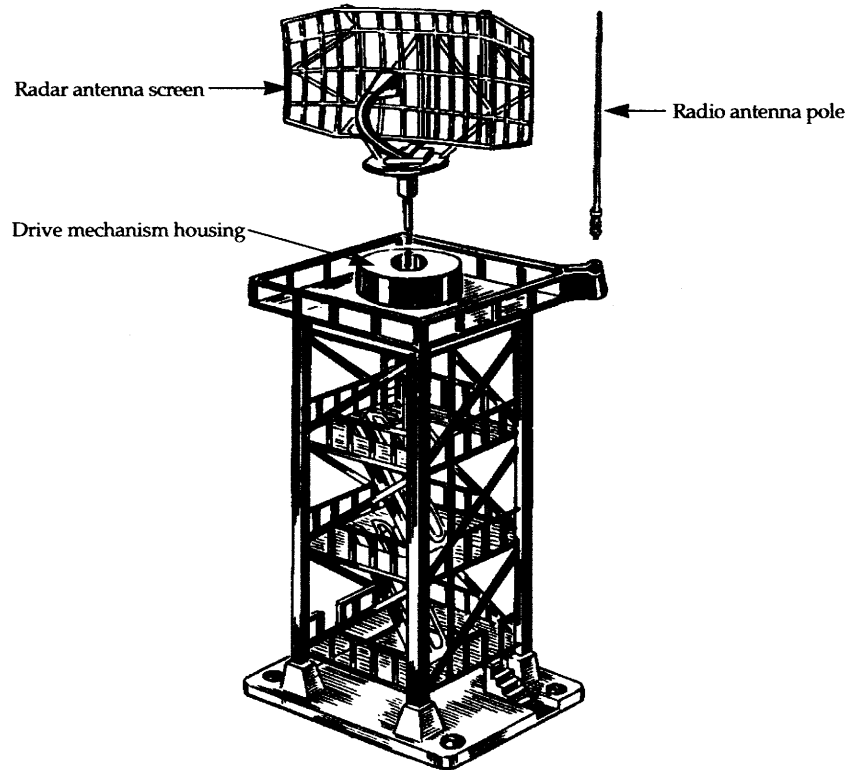


LIONEL

71-2749-250
Rev. 2/87

197 ROTARY RADAR ANTENNA

Congratulations on your purchase of the Lionel 197 rotary radar antenna. Place the 197 near the airfield on your Lionel empire to keep air traffic under control. The 197 rotary radar antenna operates between 10-13 volts alternating current.

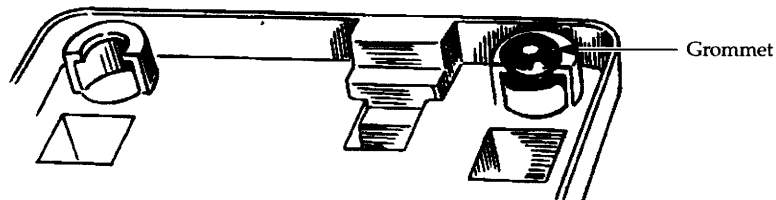


Assembling your 197 rotary radar antenna

To assemble your 197 rotary radar antenna, install a rubber grommet into each of the four holes in the corners of the tower base (see illustration below). These grommets keep the unit secure during operation.

Next, insert the shaft on the radar antenna screen into the square hole

in the drive mechanism housing located in the center of the tower platform (see illustration above). Make sure the shaft snaps in to engage the driving mechanism. Then, insert the radio antenna pole into its slot on the railing as shown above.

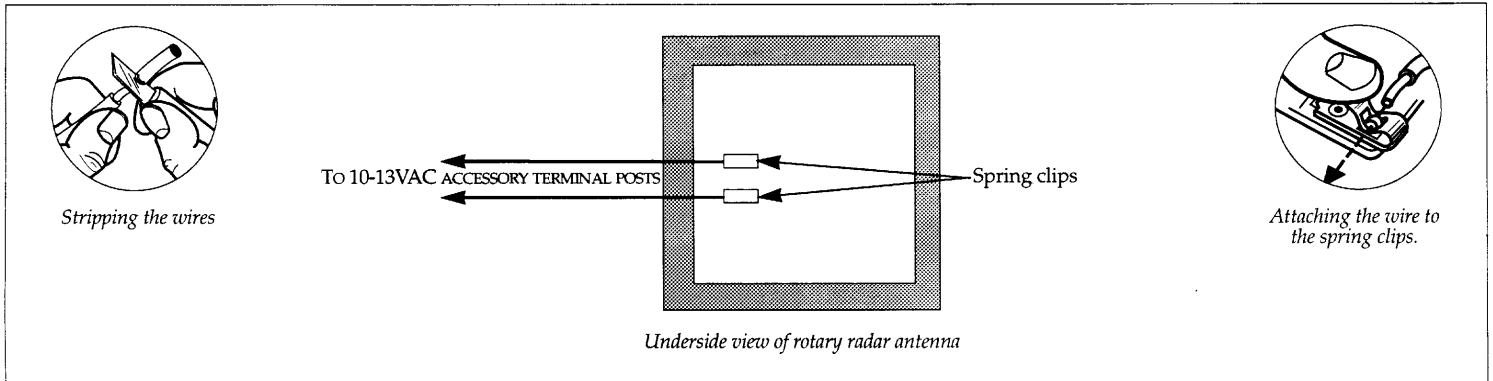


Underside view of base

Connecting your rotary radar antenna to a power source

Have an adult strip $\frac{1}{8}$ " of insulation from each end of the two wires included with your radar antenna. Connect one wire to each of the accessory's spring clips as shown below. Then attach the other end of the wires to the 10-13 VAC accessory posts on your transformer.

To connect the wires to the spring clips, press down the springy upper half of the metal loop until the lower part projects through the slot. Insert the bare wire end into the loop, and release the upper part of the clip. Spring tension will hold the wire tight.

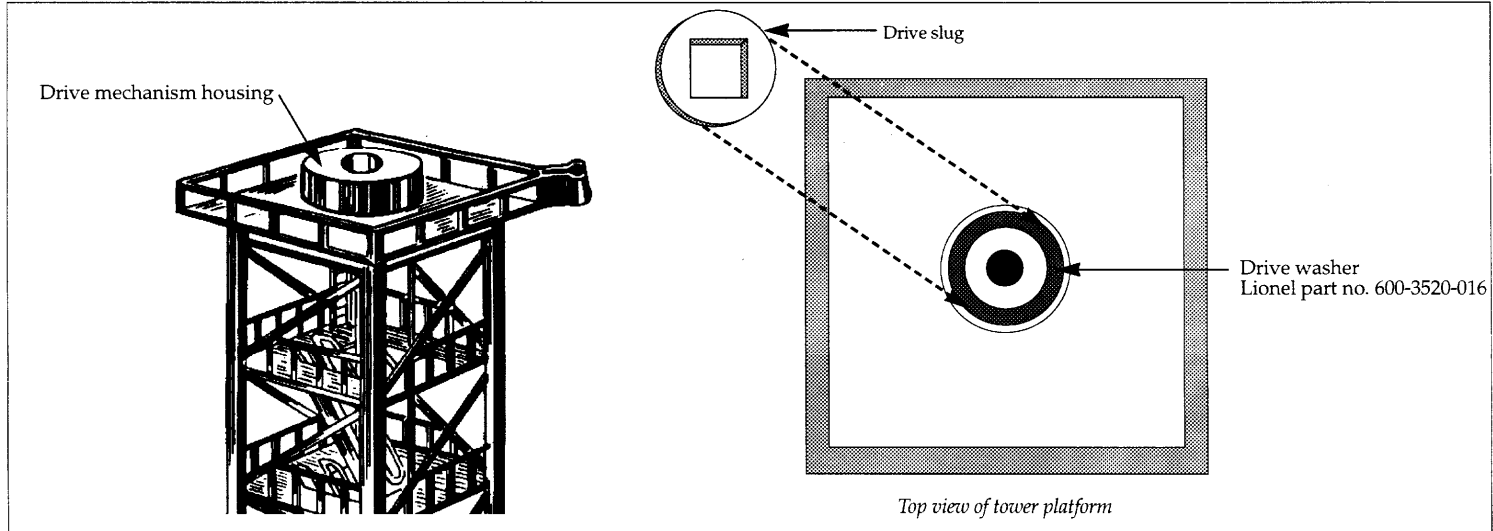


Maintaining your rotary radar antenna

After an extended period of operation, the rotating action of the radar antenna may begin to slow. If so, lubricate the drive washer with powdered graphite (available at hardware stores). Remove the radar antenna from the center of the tower. Then press in the sides of the drive mechanism housing to disengage it from its retaining slots. Remove the metal drive slug that sits in the center, and apply a small amount of powdered graphite to the drive washer. Then reassemble by centering the drive slug on top of the washer. Reinstall the housing and reinsert the antenna.

If the teeth on the drive washer wear down and cause operation to

cease, replacement washers (Lionel part no. 600-3520-016) are available from your local authorized Lionel dealer or from Lionel Service. To replace the drive washer, remove the radar antenna from the center of the tower. Then press in the sides of the drive mechanism housing to disengage it from its retaining slots. Remove the metal drive slug that sits in the center, and peel the worn drive washer off the housing. Carefully center the new washer on the coil and cement it in place using rubber cement or mucilage. Center the drive slug on top of the washer. Then reinstall the housing and reinsert the antenna.



Lionel Service

This product is built with pride by Lionel and carries a warranty to support continued reliable operation. If service is required, bring it and its warranty card to your local authorized Lionel Service Center. To find the nearest dealer or Service Center, simply call 1-800-4-LIONEL.

If you prefer a Lionel factory repair, call 810-949-4100, fax 810-949-5429, or write Lionel Service, P.O. Box 748, New Baltimore, MI 48047-0748. State the problem and the product's purchase date. We'll send a return

authorization letter to assure proper handling while at Lionel. You may choose to have your product repaired by Lionel Service after its warranty has expired. A reasonable service fee will be charged.

CAUTION: Make sure your product is properly packed to prevent shipping damage. The shipment must be prepaid, and we recommend it be insured. Please follow these instructions carefully. This warranty gives you specific legal rights. You may have other rights that vary from state to state.