Congratulations on your purchase of the Lionel intermodal crane. Your crane will transfer containers or trailers to and from rolling stock or over-the-road trucks. Modeled after the versatile intermodal crane made by the Mi-Jack Company of Hazelcrest, Illinois, this accessory operates best with O and O-27 rolling stock, but it will work with any semi-trailer or container that fits within its grappler arms and does not exceed its seven-ounce maximum lift capacity.

The crane operates just like the real thing, with forward/reverse operation, up/down stabilizing beam action, left/right cradle movement, and open/close grapplers, all remotely controlled by a realistic control panel.

Before you assemble your intermodal crane, we recommend that you read this entire manual for important instructions on its operation, care, and maintenance, as well as directions to avoid damaging your crane through misuse. If you have other questions, please contact your local authorized Lionel Service Center using the list included in a separate flier, or contact Lionel Service, 810-949-4100.

Get set to have plenty of intermodal railroad fun!
Assembling your intermodal crane is easy. Simply snap the four simulated light fixtures, the four handrail sections, and the two ladders into place in the locations shown in the illustration below.
The Lionel intermodal crane replicates virtually every operation of its real-life counterpart. Plug the control panel’s cable into the connector jack on the side of the crane (see figure below). The two black leads from the control panel attach to the AC accessory terminals on your transformer.

The intermodal crane operates best between 13-17 volts alternating current. You may need to adjust the accessory voltage level for optimum operation. Use the clamp/unclamp function to determine an appropriate voltage level. When the clamp/unclamp function is working smoothly, your transformer will be operating in the voltage range required for all other crane functions. However, you may wish to fine-tune each of these functions by increasing or decreasing the voltage slightly to find the ideal setting for each intermodal operation.

Preparing your intermodal crane for operation

There are 24 studs included with your crane for use with Lionel intermodal containers (available separately). Any Lionel long semi-trailer can also be converted to a container by removing the trailer’s chassis. Snap one stud into each of the four corner holes on the underside of the trailer or container as shown below. The studs raise the container slightly off the ground and allow the intermodal crane’s grappler arms to reach underneath to lift the containers. Note: The studs are not meant to hold the containers on your flatcar while your train is in operation.
Each lever on the control panel moves your crane: traverse (A); lift (B); clamp/unclamp (C); left drive (D); right drive (E).

The control panel has a built-in safety mechanism that returns each control lever to the neutral position when the lever is released. However, the traverse (A) and lift (B) mechanisms do not contain any end-of-cycle stops. This means when the grappler is moved all the way to the left or right, or the platform is raised to the top, you must release the control lever to prevent damage to the mechanism. The clamp/unclamp mechanism (C) functions in the same manner, and the control lever must be released when reaching the fully opened or fully closed position.

The platform is raised by cables that wind around a spool in the motor compartment at the top of the structure. If the platform is lowered to its limit and the control lever is not released, the spool will reverse the cable. The platform will then lift when the lever is in the down position and vice versa. If this happens, run the platform all the way up and then all the way down until the string rewinds in the correct direction.

**Note!**

Do not drive your intermodal crane over your track. Doing so could damage its motors and gearing.

To gain access to the lamp assembly, remove the two crosshead screws on the cover of the control house body.
Loading and unloading intermodal containers

The first order of your intermodal business is to determine a place on your model railroad that allows for the driving movement of your crane. An intermodal crane normally straddles a siding so that rolling stock can pass underneath it for loading and unloading.

A typical unloading procedure begins by driving your crane into position over a loaded railcar. Use the two drive levers separately or in combination with the other to align the crane directly over the car. Next, use the traverse control lever to maneuver the grapple arms into position directly over the container. Make sure you have enough clearance to open the grapple arms. Then, open the grapple arms using the clamp/unclamp lever, then move the up/down control to bring the grapple arms down to just above the trailer.

Note: Once the grapple arms come down, you may find that they're not in line with the container. If so, use the traverse control to move the grapples over until the arms are clear and can be lowered without touching the container's sides. It's important that your intermodal crane is parallel to the container you wish to lift.

Once the grapple arms are around the container, use the clamp/unclamp control to close the arms. Be sure the grapple pads are completely under the container before closing the grapples. Now, move the up/down control to the up position to raise the container off the railcar. Make sure the container is lifted high enough to clear all obstructions before continuing. Use the traverse control to move the container either to another empty car or to a waiting semi-tractor. Lower the container using the up/down control. Once it's lowered onto a flatcar or behind a semitruck, use the clamp/unclamp control to release the trailer. You're now ready to perform another intermodal operation, so raise the platform, and move on to the next car. It's as easy as that!

The operating life and performance level of the intermodal crane depends on proper operation. This will ensure many years of peak operating performance. Caution: The intermodal crane is designed primarily for the loading and unloading of Lionel trailers and containers. Lifting objects heavier than seven ounces could result in permanent damage to your crane and will void your warranty.

The crane's grapple arms open to approximately 2 1/2" and close to approximately 1/2". Do not force them to accept objects that are outside of these limits.

Leveling the platform

If the platform becomes tilted, it can be leveled by loosening one or more of the screws that hold the strings, and then sliding the platform eyelets either up or down. Be sure the string does not come unwound from the eyelet (see figure below). Once the platform is parallel to the ground, secure each string behind its washer, and retighten the screw. The platform is now adjusted properly.

Replacing the lamp

The control housing is illuminated by a 24-volt lamp. To gain access to the lamp, remove the two crosshead screws on the inside of the housing body (see illustration on page 4). Carefully remove the body cover and check the lamp's operation. If the lamp is loose in its socket, press it back into place. If the lamp is expired, remove the support insert. Remove the entire lamp assembly from its socket. Pull the expired bulb straight out and replace with Lionel part no. 600-2781-311, available from your authorized Lionel Service Center or Lionel Service. Make sure the wire contacts on the lamp line up with the contact plates inside the lamp socket.

To reassemble the control housing, replace the lamp assembly, realign the insert that supports the lamp, and place the cover back in position. Tighten the two screws until they are secure.
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.