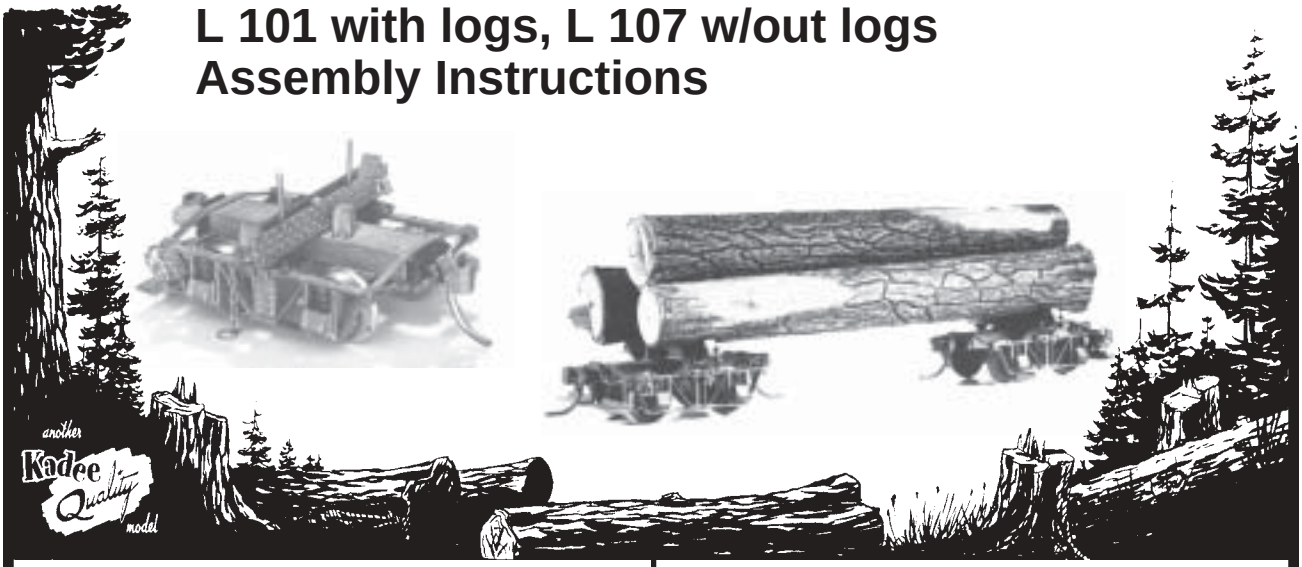
# L 101 with logs, L 107 w/out logs
# Assembly Instructions




**Read entire instructions carefully before you begin assembly and follow each step in order. Study the drawings to help identify each part and how they fit.**

**Tools:** small files, sharp hobby knife, small screwdriver, tweezers, needle-nose pliers, magnifying glass, Kadee #1020 tweezers, #231 Greas-em graphite lubricant, #235 Spring Pic, black touch up paint.

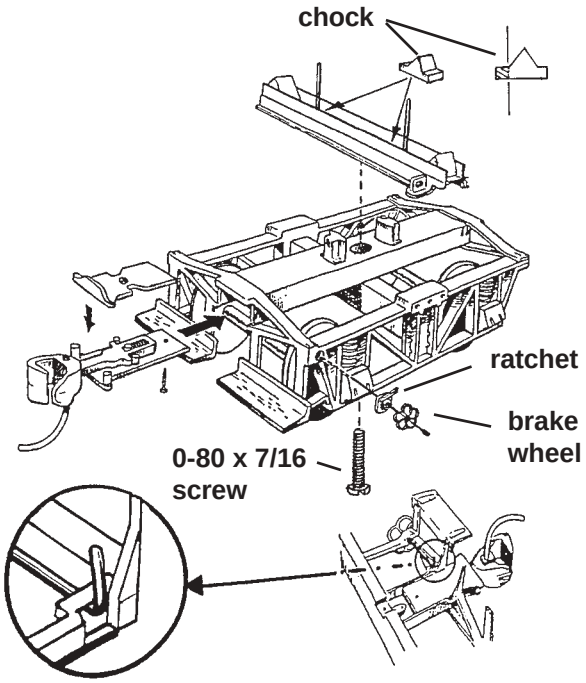
**This is a craftsman car kit. Modeling skills and dexterity are required.**

Clean all flash with a scraper or small file. The ends of the bunks and the holes for the brake wheel rod on the trucks should be checked. If you choose, touch up the bare metal with paint.

**Parts List:** 2 ea. Preassembled #101 trucks, 1 ea. #15 coupler pkg, 2 log bunks, 2 brake wheels, 2 brake ratchets, 3 brake staffs (rods with flat ends), 1 ea. 5 in. piece of chain, 5 log bunk pins (with dimpled ends), 3 ea. 0-80 x 7/16 screws, 5 escutcheon pins (brads), 5 grab rings, 6 plastic chocks (on sprue), chain threading wire.

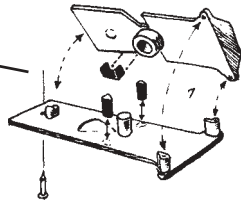
Note, the brake wheels are attached on opposite corners of each truck. They should be on the same side when the footboards are pointed in the opposite directions. The brake wheel and ratchet have lugs attached. Hold the part by the lugs and trim or file off any flash. Hold the part with a pair of pliers and carefully break off the lugs and file the break points smooth. Slip the brake wheel and ratchet (with the gear next to the brake wheel) onto the brake rod. Slide the rod through the hole in the sideframe of the truck and into the hole in the centerbeam (into the opposite hole for the other truck). Use a pair of needle-nose pliers and carefully bend the tip of the rod around (hooking) the edge of the centerbeam hole securing the brake wheel assembly.

Make sure the coupler pocket is clear of any flash. Assemble the couplers according to their instructions. Slide the draft gear box (assembled coupler) into the coupler pocket, press on the end of the box if needed, not the coupler. Be sure the bottom plate is against the crossbeam and the small holes in the plate and centerbeam match up. Check for proper coupler function and secure by pressing an escutcheon pin (brad) into the small hole.

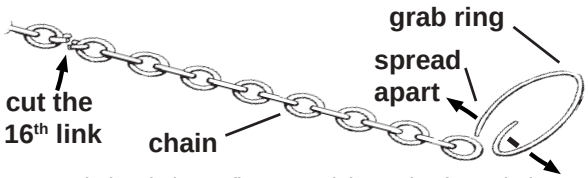



Notice that there are two tops (lids) for the draft gear box. The one normally used with its #4 type of coupler and one that is used with the #5 or 20 series couplers and springs (not included). For some modelers it may be easier to use the #5 or #28 coupler rather than the included #4 type. To use a #5 or 20 series coupler trim off the noted pins in the illustration. Place the bronze centering spring onto the centerpost of the top plate, then the coupler. Assemble the top and bottom plates together, the centerpin of the bottom plate fits into the centerpost of the top. Check to be sure the corners of the spring are inside of the cornerposts of the gear box. Insert and secure as above.

**#15 draft gear box for use with the #5 or 20 series coupler.**



Weighted logs may compress the springs of the trucks enough to lower the coupler height requiring the use of an offset coupler (#27).



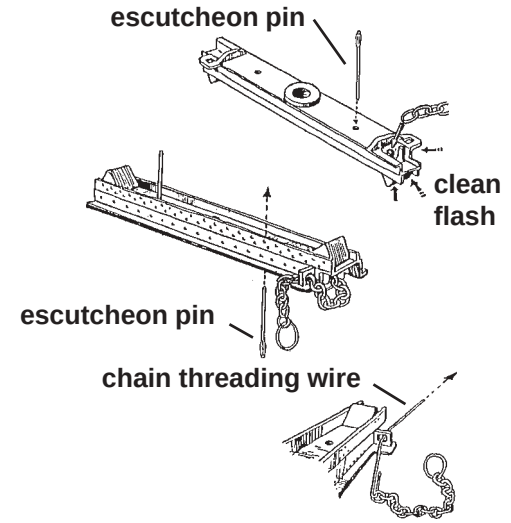

Stretch the chain out flat, spread the ends of a grab ring sideways (tweezers and a magnifying glass may help), slip the ring through the end link of the chain and press the ends of the ring closed. Count 16 links from the end of the chain and cut the 16th link. Follow this procedure three more times to where you have 4 pieces 15 links long with a grab ring on the end of each one.

Hook the end of the chain threading wire (one end should already be bent into a hook) through the end link of one of the pieces of chain. Thread it through the hole on the end of the bunk from the inside out. The hole may need to be enlarged slightly. Pull the chain through about half way, unhook the wire, hook the end link behind the two posts under the end of the bunk, the second link is between the posts. Carefully glue the end link in position with a CA glue or a DUCO type of cement. The grab ring will hang free. Follow this procedure for the other three pieces of chain, and allow time for the glue to set.

Note the dimpled (flat or dented) end of the log bunk pins. From the bottom of the log bunk press (drive) the pins through the holes so the pins protrude out the top with the dimpled end in the bunk and flush with the bottom. Place the bunk on the truck and secure with the 0-80 x 7/16 screw from the bottom. Do not over tighten, for the bunk needs to pivot freely. To secure the screw use a needle or pin to place a very small amount of CA glue to the top of the screw between the rails of the log bunk.

Remove 4 of the chocks from the sprue and place in the slot on the bunk between the pins, two in each bunk. The chocks can be moved back and forth to adjust for the log location.

For a more prototypical appearing log load, slightly enlarge the pin holes in the logs so they can roll out to the end chock of




the bunk. Slide the center chocks against the inside of the logs. The side lug of the center chock can be trimmed off to slide it closer to the pin if necessary. If the disconnected log cars are going to be used in a long string of cars it is recommended to glue the chocks into the bunks and glue the logs together and to the chocks in the bunks. Make sure the bunks are at a right angle to the trucks and parallel to each other. Do not let any glue seep into the pivot screw, the bunks have to pivot freely. This will make a more secure load and help prevent the trucks from being lifted by the opposing forces of the locomotive and the trailing cars caused by the higher center of gravity.

To avoid duplicating log loads use photographs as a guide to show how logs are loaded and to help in painting and texturing the logs. Logs usually are stacked and loaded unevenly or offset and show various signs of handling from minor scrapes to major gashes and loose or missing bark.

## GLUING INSERT

To prevent losing knuckle springs by being dislodged use the following steps and supplies. Kadee® #235 Spring Pic, small piece of blue denim cloth, DUCO® CEMENT or WALTHERS® GOO®, or similar type cement. **CAUTION:** Always follow safety instructions for the cement that you may be using.

1. To pick up spring place it on the cloth (this allows the small springs to be seen and picked up easier) and insert #235 Spring Pic into spring between coils near one end. See Fig. 1.

Fig. 1.

2. Touch one end of the spring into the cement so that no more than one or two coils are coated (too much cement will hamper coupler performance). See Fig. 2.

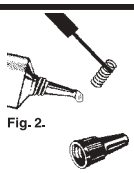


Fig. 2.

3. Place glued end over the knuckle retaining post and then compress spring so that it may slip over the opposing shank retaining post. See Fig. 3.

4. Carefully remove pic from spring.

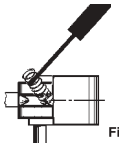


Fig. 3.

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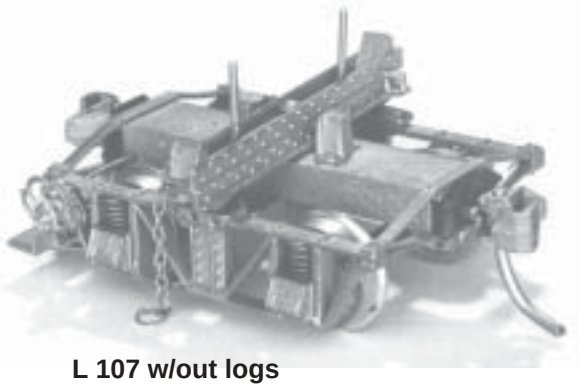
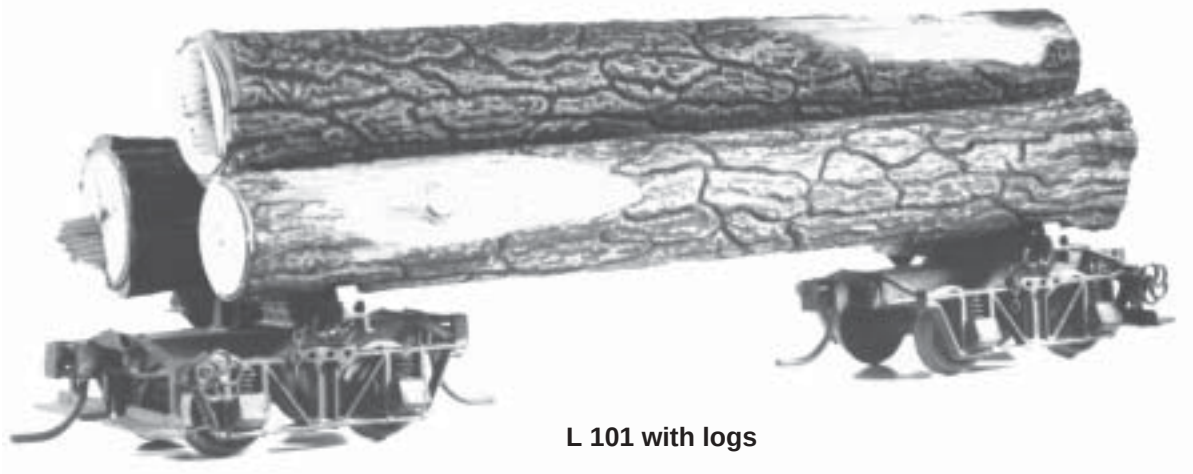


**L 107 w/out logs**



**L 101 with logs**